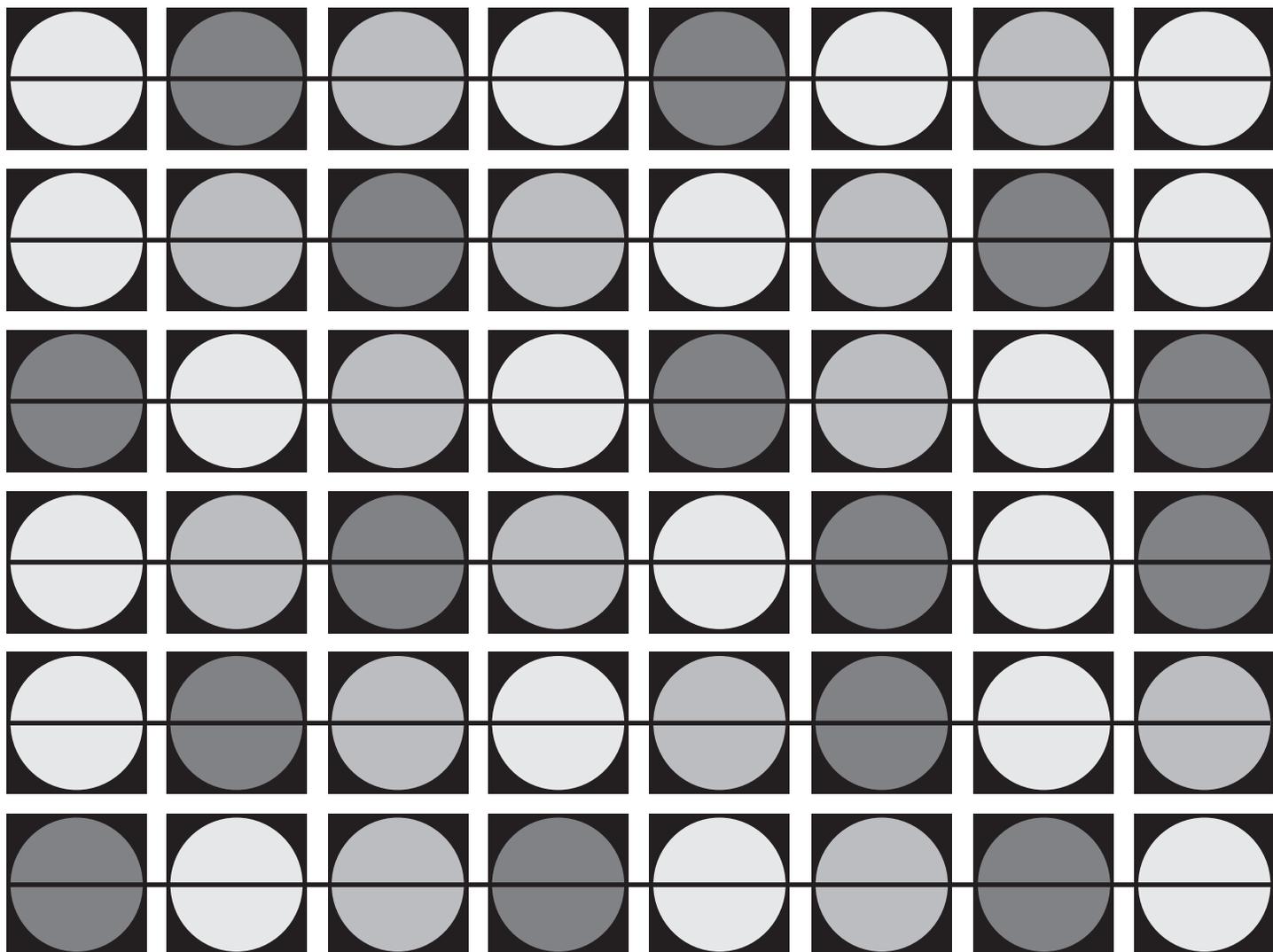


Instruction Manual

Part 11

Computer Edits for Mortality Data, Effective 1999

From the CENTERS FOR DISEASE CONTROL AND PREVENTION/National Center for Health Statistics



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control and Prevention
National Center for Health Statistics

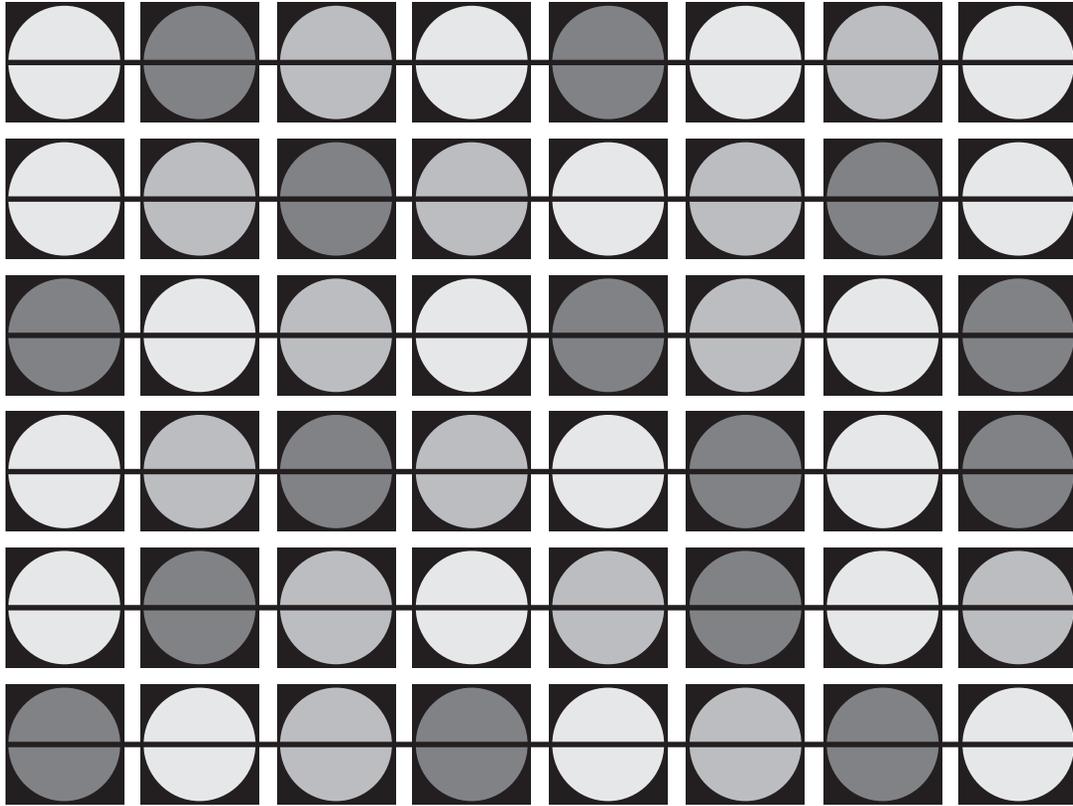


Instruction Manual

Part 11

Computer Edits for Mortality Data, Effective 1999

Vital Statistics Data Preparation



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics

Hyattsville, Maryland
August 1998

Acknowledgments

This instruction manual was prepared by the Division of Vital Statistics (DVS) under the general direction of Harry M. Rosenberg, Ph.D., Chief of the Mortality Statistics Branch (MSB). Jeffrey D. Maurer (MSB) wrote the text and coordinated production of the manual. Donna Glenn (DVS), Jeffrey D. Maurer, Robert Anderson, Betty Smith (MSB); Linda Le (contractor); Joyce Bius, Tanya Pitts, Julia Raynor of the Data Preparation Branch (DPB); June Pearce, Shirley Turbiville (formerly of DPB, DDP); and Wilma Latta (formerly of Data Acquisition and Evaluation Branch, DVS) provided expertise in creating the valid and invalid ICD-10 codes and the edits. Sherry L. Murphy, Kenneth D. Kochanek, Kimberly D. Peters, and Betty L. Smith provided review of the instruction manual. David Johnson and Charles E. Royer of the Systems, Programming, and Statistical Resources Branch, (DVS) provided review of the demographic edits.

Questions regarding this manual and related processing problems should be directed to the Data Acquisition and Evaluation Branch, Division of Vital Statistics, National Center for Health Statistics, P.O. Box 12214, Research Triangle Park, North Carolina 27709 or Systems Programming, and Statistical Resources Branch, Division of Vital Statistics, National Center for Health Statistics, 6525 Belcrest Road, Hyattsville, Maryland 20782. Questions concerning interpretation of mortality data should be referred to the Mortality Statistics Branch, Division of Vital Statistics, National Center for Health Statistics, 6525 Belcrest Road, Room 820, Hyattsville, Maryland 20782.

CONTENTS

<u>Section</u>	<u>Page</u>
I Introduction	1
A. Purpose of This Manual	1
B. Revisions from Previous Manual	2
II Final Mortality File Computer Edits	3
A. Demographic Items	4
B. Medical Items	4
1. Codes Valid for Both Underlying and Multiple Causes of Death	4
2. Codes Valid for Multiple Cause Only	4
3. Created Codes	5
C. Composite Medical/Demographic Record	5
1. Age/Cause, Sex/Cause Consistency Edits	5
2. Infrequent and Rare Cause-of-Death Edits	6
3. Place-of-Occurrence Edits for Selected External Causes of Death	6
4. Activity Code Edits for Selected External Causes of Death	7
III Preliminary Mortality File Computer Edits	7
A. Demographic Items	8
B. Medical Items	8
1. Codes Valid for Both Underlying and Multiple Causes of Death	8
2. Codes Valid for Multiple Cause Only	9
3. Created Codes	9

C. Composite Medical/Demographic Record	9
1. Age/Cause, Sex/Cause Consistency Edits	9
2. Infrequent and Rare Cause-of-Death Edits	10
3. Place-of-Occurrence Edits for Selected External Causes of Death	10
4. Activity Code Edits for Selected External Causes of Death	10

IV Tables

A. Demographic Edits and ICD-10 Cause-of-Death Edits for Final Mortality File and Preliminary Mortality File and Resulting Action if a Record Fails the Edit	12
B. Edits for Demographic Items	13
C. ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification	18
D. ICD-10 Nature of Injury Codes Valid for Multiple Cause Classification Only (From Chapter XIX, Injury, Poisoning and Certain Other Consequences of External Causes)	26
E. ICD-10 Codes Valid for Multiple Cause Classification Only (From Chapters I-XVIII and XX)	28
F. Created Codes and Their Complementary Valid ICD-10 Codes	29
G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification	30
H. Age/Cause, Sex/Cause Consistency Edits for ICD-10 Codes Valid for Multiple Cause-of-Death Classification Only	44
I. Infrequent and Rare Cause-of-Death Edits for Underlying and Multiple Cause-of-Death Classification	45
J. Place-of-Occurrence Edits for Selected External Causes of Death (ICD-10 W00-Y34, except Y06._, Y07._)	47
K. Activity Code Edits for Selected External Causes of Death (ICD-10 V01-Y34)	48

VITAL STATISTICS COMPUTER EDITS

FOR

MORTALITY DATA, EFFECTIVE 1999

I. INTRODUCTION

A. Purpose of This Manual

This manual presents a comprehensive description of the mainframe computer edits used by the National Center for Health Statistics (NCHS) in processing mortality data beginning with data year **1999**. The edits include both medical edits for the Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems, **Corrected and Updated by NCHS** (ICD-10) and demographic edits. Edits for two different applications are discussed in this manual:

- (1) the final mortality file which consists of death certificates filed for all deaths occurring in the United States in a calendar year. For this file, the data are tabulated and published annually.
- (2) the preliminary mortality file which is based on a continuous receipt of a large sample of death certificates that are processed and tabulated on a semi-annual basis for U.S. deaths occurring in the 12-month periods January-December and July-June. The purpose of the preliminary mortality file is to produce data on an expedited basis compared with the final file.

It should be noted that the final mortality file essentially consists of the January-December preliminary mortality file plus all additional and adjudicated death records received through nine months after the end of the calendar year.

Edits used for mainframe processing of the final mortality file are likely to be of greatest relevance and interest to the States, while edits used for the preliminary file are used by NCHS on a current flow to produce biannual preliminary mortality statistics.

Both the final and the preliminary mortality files are generated through a series of processing steps including data collection, data entry, and computer

processing. Editing of the coded data to assure code validity and consistency among variables is carried out at both the data entry and mainframe computer processing stages. The data entry edits, performed either manually or interactively on a data entry computer, enable detection and correction of major inconsistencies at the point of data entry. The mainframe edits utilize greater computer capability to provide a more comprehensive edit, yet generally require reject reconciliation for correction of errors. Thus, the data entry edits are composed of a small selective subset of the more comprehensive mainframe edits. This manual contains only the mainframe edits. Data entry edits are specified in Part 2d of this Vital Statistics Instruction Manual series.

The mainframe computer edits are performed at strategic locations (appropriate to their function and application) within the processing flow. They are applied only after the data have passed key entry quality control standards and key entry edit criteria.

B. Revisions from Previous Manual

Changes between this manual and the previous one (effective 1990) are shown in **bold** print and consist of the following:

1. The following changes have been made in the demographic edits ([table B](#)):
 - a.) Edit procedures for the variable race for valid and “not stated” codes have been changed effective 1992.
 - b.) Edit procedures for the variable race for “multi-racial” codes have been changed effective 1995.
 - c.) Edit procedures for the variable occupation of decedent have been added effective 1993.
 - d.) Edit procedures for the variable type of industry have been added effective 1993.
 - e.) Edit procedures for the variable injury at work have been added effective 1993.
 - f.) The autopsy variable has been deleted from the NCHS file effective 1995.
 - g.) Edit procedures for the variable Hispanic origin of decedent have been changed effective 1999.

2. The ICD-10 codes have been incorporated in [tables C-K](#).
3. [Table K](#) is a new table that shows the edits for the activity of the injured person at the time the event occurred.
4. Edit procedures for the preliminary mortality file have been added effective with 1995 and procedures for the Current Mortality Sample file (CMS) have been deleted because the CMS was discontinued beginning with data year 1998.

II. FINAL MORTALITY FILE COMPUTER EDITS

The final mortality file is used to produce annual detailed tabulations of demographic and geographic data and contains both underlying and multiple cause-of-death data. The demographic and medical data are entered and processed separately. The demographic data are first key entered and sample verified with interactive key entry editing. The resultant demographic record is then established as a master control record in checks of file completeness and subsequent edits of the geographic, demographic, and control variables. On a separate track, the medical data are key entered and sample verified. The mainframe edits are then applied to check code validity for each variable. Finally, the demographic and medical data are merged into one composite record at which point demographic/medical consistency edits are applied. In addition, this stage rechecks medical code validity and lists rare causes for review.

Since NCHS receives the death records on a flow basis, all of the above edits are performed on a continuous basis and records that fail the edits are adjudicated on a continuous basis. At the time the final mortality file is closed (9 months after the end of the data year), all records have been included in the file and adjudicated.

It should be noted that at many points during the processing of the file computer software will reject records for reasons other than failure to meet the

edit criteria in this manual. In particular, the MICAR¹, ACME², and TRANSAX³ automatic coding systems reject records for resolution of issues which cannot be handled automatically.

The automated edits are designed to (1) assure code validity for each variable and (2) verify codes or code combinations which are considered either impossible or unlikely occurrences. Additionally, for certain demographic variables, the edits convert codes which are unacceptable for statistical analysis to acceptable codes. In edit failures, the proper code is determined in one of two ways. In specific situations, the proper code is imputed or automatically generated without reference to the source certificate. In other situations, the record is rejected and listed for adjudication of the codes with the information in the source document and/or with the State health department.

The kind of action is dependent on the variable category involved in the edit. Edits for unlikely occurrences (conditional edits) are always checked with the source document. When a data record is edit rejected, the corrected record is once again processed through the edits to verify passage of the edit (conditional edits are deactivated in the second pass). The edits and their resulting actions are summarized in [table A](#).

A detailed description of all mainframe computer edits is provided below.

A. Demographic Items

[Table B](#) provides, for each demographic variable, the edit criteria (if any) which are applied to each category of the variable. Fail edits are identified in terms of whether the results are imputed or rejected for adjudication. Records having fail edits on the “place of death” (occurrence) and “residence of decedent” items are rejected and are listed for reference to the source document to establish the proper code assignment.

¹Acronym for Mortality Medical Indexing, Classification, and Retrieval which is used to initially enter cause-of-death information.

²Acronym for Automated Classification of Medical Entities system which checks the condition codes for validity and automatically assigns the underlying cause of death from the condition codes.

³Acronym for Translation of Axis system which translates the condition codes from an entity axis of classification to a record axis of classification for purposes of general multiple cause tabulation and analysis.

B. Medical Items

Valid cause-of-death codes in ICD-10 are categorized in terms of their validity for underlying and multiple cause-of-death classification.

1. Codes Valid for Both Underlying and Multiple Causes of Death

Table C lists the codes valid for both underlying and multiple cause classification.

2. Codes Valid for Multiple Cause Only

Tables D and **E** list the ICD-10 codes which are valid for multiple cause coding but not for underlying cause coding. **Table D** contains the Nature of Injury codes from **Chapter XIX, Injury, poisoning and certain other consequences of external causes (S00-T98)**.

Table E lists other codes in ICD-10 Chapters I-XVIII and XX which are valid for multiple cause coding only. Included in this group are Postprocedural endocrine, metabolic, nervous system, eye, adnexa, ear, mastoid process, circulatory system, respiratory, digestive system, musculoskeletal, and genitourinary system disorders, not elsewhere classified. Also included in this group are Complications following abortion and ectopic and molar pregnancy. The rules for underlying cause-of-death classification prefer other codes over those listed in this table. (For more detail, see Part 2a of this Vital Statistics Instruction Manual series.)

3. Created Codes

Table F contains a list of special five-digit codes (plus R97) and their complementary valid ICD-10 codes. The created codes are used at the stage medical conditions are coded. They have been created to facilitate automated identification of causal and modification relationships between certain medical conditions when they are processed by the ACME and TRANSAX computer systems. After they have served this purpose, they are converted to their complementary valid ICD-10 codes and do not appear on the final master death tape or in NCHS tabulations of causes of death. Further explanation of the use of these codes may be found in Parts 2b and 2c of this Vital Statistics Instruction Manual series.

C. Composite Medical/Demographic Record

After the demographic and medical data are merged, the following edits are performed:

1. Age/Cause, Sex/Cause Consistency Edits

The purpose of this computer edit is to maintain consistency between a reported underlying or multiple cause of death and the age and/or sex of the decedent. [Table G](#) lists the consistency edits applicable to codes given earlier in [Table C](#) (codes valid for both underlying and multiple causes of death). [Table H](#) lists consistency edits applicable to codes given earlier in [Tables D](#) and [E](#) (codes valid for multiple cause coding only). The limitations embody the concept that certain combinations of cause of death with age or sex are either impossible (absolute limitation) or that the combinations are highly improbable (conditional limitation). The causes of death shown in these lists include age and/or sex absolute or conditional limitations explicit in **ICD-10**. Additional conditional limitation edits are applied to **ICD-10** categories where occurrence of the category with particular age/sex combinations is considered to be highly improbable or where experience has shown that a particular cause is especially prone to coding error.

Detailed instructions for processing edit rejects are given in Part 2d of this Vital Statistics Instruction Manual series. In general, the source document is examined to determine if the medical and demographic data are accurately coded based on reporting. Where inaccurate, the codes are corrected. When coded data agree with reported information, no change is made if the edit is conditional in nature. If the edit is absolute, the age (or sex) is arbitrarily retained as coded, and the cause(s) are changed to the minimum necessary to pass the edit.

2. Infrequent and Rare Cause-of-Death Edits

Table I contains a list of infrequent and rare causes of death in the United States. These causes of death occur rarely and/or present threats to public health in the United States. As a result, each case should be verified to make sure there was no error in certification. When NCHS requests confirmation of a rare cause of death, the Vital Statistics Cooperative Program (VSCP) project director should work with staff to verify that the cause-of-death coding is correct and obtain corroboration from the State Health Officer before signing the confirmation letter. A notation of confirmation should also be recorded on the copy of the certificate sent to NCHS. In the absence of this notation, the NCHS coder will code the disease as stated; the VSCP project officer will be contacted at the time of

reconciliation of rejected data records by control cycle to confirm the accuracy of the certification.

3. Place-of-Occurrence Edits for Selected External Causes of Death

Table J lists the place-of-occurrence edits for selected external causes of death (ICD-10 W00-Y34, except Y06._ and Y07._) that may be either an underlying or a multiple cause of death. The table includes valid place-of-occurrence codes that denote the place where the external cause of death occurred. For a listing of place-of-occurrence codes and their definitions see ICD-10, Vol. 1, in the beginning of Chapter XX. The place-of-occurrence codes assigned are based on reported entries on State death certificate items equivalent to the 1989 revision of the U.S. Standard Certificate of Death item “30e. Place of injury”.

4. Activity Code Edits for Selected External Causes of Death

Activity codes are new in ICD-10 and are supplementary codes that are applicable for selected external causes of death (ICD-10 V01-Y34) that may be either an underlying or a multiple cause of death. **Table K** shows the codes that denote the activity of the injured person at the time the death occurred. For a listing of activity codes and their definitions see ICD-10, Vol. 1, in the beginning of Chapter XX. The activity codes assigned are based on reported entries on State death certificate items equivalent to the 1989 revision of the U.S. Standard Certificate of Death item “30d. Describe how injury occurred”. NCHS will evaluate the quality of the 1999 data and will determine if more detailed edits are warranted.

III. PRELIMINARY MORTALITY FILE COMPUTER EDITS

The preliminary mortality file has less detailed tabulations of demographic and geographic data than the final mortality file and is restricted to tabulations of only the underlying cause of death. It includes death records received by NCHS about four months after the end of each of the two 12-month periods (January-December and July-June). The preliminary mortality file consists of a substantial sample (usually, at least 75 percent for each State) of the death certificates included in the final mortality file.

The demographic and medical data are entered and processed separately. The demographic data are first key entered and sample

verified with interactive key entry editing. The resultant demographic record is then established as a master control record in checks of file completeness and in subsequent edits of the geographic, demographic, and control variables. On a separate track, the medical data are key entered and sample verified. The mainframe edits are then applied to check code validity for each variable. Finally, the demographic and medical data are merged into one composite record at which point demographic/medical consistency edits are applied.

Since NCHS receives the death records on a flow basis, all of the above edits are performed on a continuous basis and records that fail the edits are adjudicated on a continuous basis. However, at the cut point, the point at which records are no longer accepted for a preliminary mortality file (about four months after the January-December or July-June period), some records that failed the edits have not been adjudicated. Due to the need for timely release of the preliminary mortality data, there is not enough time to adjudicate all errors in the preliminary mortality file. Therefore, some of the edit procedures for the preliminary mortality file differ from those for the final mortality file. For example, for the demographic/medical consistency edits, records that fail the “absolute” edits are deleted from the preliminary mortality file. Records that fail the “conditional” edits are not reviewed, but are retained in the preliminary mortality file.

The automated edits are designed to (1) assure code validity for each variable and (2) verify codes or code combinations which are considered either impossible or unlikely occurrences. Additionally, for certain demographic variables, the edits convert codes which are unacceptable for statistical analysis to acceptable codes. In edit failures, the proper code is determined in one of two ways. In specific situations, the proper code is imputed or automatically generated without reference to the source certificate. In other situations, the record is rejected and listed for adjudication of the codes with the information on the source document and/or with the State health department.

All the demographic items that fail the demographic edits (except place of death) and “residence of decedent” (county/city) are imputed and all records that fail the “absolute” demographic/medical edits are deleted from the file. The edits and their resulting actions are summarized in [table A](#).

A detailed description of all mainframe computer edits is provided below.

A. Demographic Items

Table B provides, for each demographic variable, the edit criteria (if any) which are applied to each category of the variable. Records having fail edits for demographic items other than “place of death” (occurrence) and “residence of decedent” (county/city) are imputed. At the cut point, if the edit for “place of death” (State of occurrence) fails, the record is deleted. The edits for “place of death” (county of occurrence) and “residence of decedent” (county/city) are not used. The edit for “residence of decedent” (State of residence), however, is used.

B. Medical items

Valid cause-of-death codes in ICD-10 are categorized in terms of their validity for underlying and multiple cause-of-death classification.

1. Codes Valid for Both Underlying and Multiple Causes of Death

Table C lists the codes valid for both underlying and multiple cause classification. At the cut point, if a cause-of-death code is invalid, the record is deleted from the preliminary mortality file.

2. Codes Valid for Multiple Cause Only

Tables D and **E** list the ICD-10 codes which are valid for multiple cause coding but not for underlying cause coding. **Table D** contains the Nature of Injury codes from Chapter XIX, Injury, poisoning and certain other consequences of external causes (S00-T98).

Table E lists other codes in ICD-10 Chapters I-XVIII and XX which are valid for multiple cause coding only. Included in this group are Postprocedural endocrine, metabolic, nervous system, eye, adnexa, ear, mastoid process, circulatory system, respiratory, digestive system, musculoskeletal, and genitourinary system disorders, not elsewhere classified. Also included in this group are Complications following abortion and ectopic and molar pregnancy. The rules for underlying cause-of-death classification prefer other codes over those listed in this table. (For more detail, see Part 2a of this Vital Statistics Instruction Manual series.) **At the cut point, if a cause-of-death code is invalid, the record is deleted from the preliminary mortality file.**

3. Created Codes

Table F contains a list of special five-digit codes (plus R97) and their complementary valid ICD-10 codes. The created codes are used at the stage medical conditions are coded. They have been created to facilitate automated identification of causal and modification relationships between certain medical conditions when they are processed by the ACME and TRANSAX computer systems. After they have served this purpose, they are converted to their complementary valid ICD-10 codes and do not appear on the final master death tape or in NCHS tabulations of causes of death. Further explanation of the use of these codes may be found in Parts 2b and 2c of this Vital Statistics Instruction Manual series.

C. Composite Medical/Demographic Record

After the demographic and medical data are merged, the following edits are performed:

1. Age/Cause, Sex/Cause Consistency Edits

The purpose of this computer edit is to maintain consistency between a reported underlying or multiple cause of death and the age and/or sex of the decedent. **Table G** lists the consistency edits applicable to codes given earlier in **Table C** (codes valid for both underlying and multiple causes of death). **Table H** lists consistency edits applicable to codes given earlier in **Tables D** and **E** (codes valid for multiple cause coding only). The limitations embody the concept that certain combinations of cause of death with age or sex are either impossible (absolute limitation) or that the combinations are highly improbable (conditional limitation). The causes of death shown in these lists include age and/or sex absolute or conditional limitations explicit in ICD-10. Additional conditional limitation edits are applied to ICD-10 categories where occurrence of the category with particular age/sex combinations is considered to be highly improbable or where experience has shown that a particular cause is especially prone to coding error. At the cut point, the conditional limitation edits, shown in **tables G** and **H**, are not used for the preliminary mortality file.

Detailed instructions for processing edit rejects are given in Part 2d of this Vital Statistics Instruction Manual series. In general, the source document is examined to determine if the medical and demographic data are accurately coded based on reporting. At the cut point, records that fail the “absolute” edits shown in **tables G**

and **H** are deleted from the preliminary mortality file. The “conditional” edits shown in **tables G** and **H** are not used.

2. **Infrequent and Rare Cause-of-Death Edits**

The infrequent and rare cause-of-death edits shown in **table I** are not used for the preliminary mortality file.

3. **Place-of-Occurrence Edits for Selected External Causes of Death**

Table J lists the place-of-occurrence edits for selected external causes of death (ICD-10 W00-Y34, except Y06._ and Y07._) that may be either an underlying or a multiple cause of death. The table includes valid place-of-occurrence codes that denote the place where the external cause of death occurred. For a listing of place-of-occurrence codes and their definitions see ICD-10, Vol. 1, in the beginning of Chapter XX. The place-of-occurrence codes assigned are based on reported entries on State death certificate items equivalent to the 1989 revision of the U.S. Standard Certificate of Death item “30e. Place of injury”.

4. **Activity Code Edits for Selected External Causes of Death**

Activity codes are new in ICD-10 and are supplementary codes that are applicable for selected external causes of death (ICD-10 V01-Y34) that may be either an underlying or a multiple cause of death. **Table K** shows the codes that denote the activity of the injured person at the time the death occurred. For a listing of activity codes and their definitions see ICD-10, Vol. 1, in the beginning of Chapter XX. The activity codes assigned are based on reported entries on State death certificate items equivalent to the 1989 revision of the U.S. Standard Certificate of Death item “30d. Describe how injury occurred”. NCHS will evaluate the quality of the 1999 data and will determine if more detailed edits are warranted.

Table A. Demographic Edits and ICD-10 Cause-of-Death Edits for the Final Mortality File and the Preliminary Mortality File and Resulting Action if a Record Fails the Edit (impute; reject and adjudicate; or delete the record)

Edit table	Edit	Final file		Preliminary file	
		Impute	Reject	Impute	Delete
	Demographic				
B	All items, except Place of death and Residence of decedent	X		X	
B	Place of death (State)		X		X
B	Place of death (county)		X	Not used	
B	Residence of decedent (State)		X	X	
B	Residence of decedent (county/city)		X	Not used	
	Cause-of-death				
C	ICD-10 codes valid for underlying and multiple causes		X		X
D	ICD-10 nature-of-injury codes valid for multiple causes only		X		X
E	ICD-10 codes valid for multiple causes only		X		X
G	Age/cause and sex/cause consistency edits for ICD-10 codes valid for both underlying and multiple causes (absolute)		X		X
G	Age/cause and sex/cause consistency edits for ICD-10 codes valid for both underlying and multiple causes (conditional)		X	Not used	
H	Age/cause and sex/cause consistency edits for ICD-10 codes valid for multiple causes only (absolute)		X		X
H	Age/cause and sex/cause consistency edits for ICD-10 codes valid for multiple causes only (conditional)		X	Not used	
I	Infrequent and rare cause-of-death edits for underlying and multiple cause-of-death		X	Not used	
J	Place-of-occurrence edits for selected external causes of death	X		X	
K	Activity code edits for selected external causes of death	X		X	

NOTE: Table F does not show edits and, therefore, is not shown in this table.

Table B. Edits for Demographic Items

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit Corrected By</u>
Sex	Code must be valid and other than "not stated".	Imputation: If last digit of certificate number is odd number, sex is assigned female code. If last digit of certificate number is even number, sex is assigned male code.
Date of Death: Month	Code must be valid and other than "not stated".	Imputation: Date of death from last preceding record containing a valid date of death is substituted.
Day	Code must be valid (month is valid also).	Imputation: Assign to "not classifiable" code.
Age of Decedent: Number of Units	Both codes must be valid.	Imputation: Assign to "not classifiable" code (999).
Units	Combination of unit and number of units must be acceptable.	(See page 14.)

Table B. Edits for Demographic Items - Continued

IF UNIT OF AGE IS:	AND NO. OF UNITS IS:	THEN FINAL EDITED AGE IS:
9 (not classifiable)	Anything -----)
Codes 0, 2-6	00 -----)
Code 1 (100 or more years)	Greater than 35 -----)
Code 2 (months)	Greater than 23 -----)
Code 3 (weeks)	Greater than 47 -----) 999 (not
Code 4 (days)	Greater than 60 -----) classifiable)
Code 5 (hours)	Greater than 72 -----)
Code 6 (minutes)	Greater than 95 -----)
Code 0 (years - less than 100)	01-99	001-099
Code 1 (100 or more years)	00-35	100-135
Code 2 (months)	01-11	201-211
Code 2 (months)	12-23	001 (1 year)
Code 3 (weeks)	01-03	301-303
Code 3 (weeks)	04-08	201 (1 month)
Code 3 (weeks)	09-12	202 (2 months)
" " "	13-17	203 (3 months)
" " "	18-21	204 (4 months)
" " "	22-25	205 (5 months)
" " "	26-29	206 (6 months)
" " "	30-34	207 (7 months)
" " "	35-38	208 (8 months)
" " "	39-42	209 (9 months)
" " "	43-47	210 (10 months)
Code 4 (days)	01-27	401-427
" " "	28-59	201 (1 month)
" " "	60	202 (2 months)
Code 5 (hours)	01-23	501-523
Code 5 (hours)	24-72	401-403 (days)
Code 6 (minutes)	01-59	601-659
Code 6 (minutes)	60-95	501 (1 hour)
Codes 2-6 (months-minutes)	99 (no. of units not classifiable)	2-6, 99*

*In the age recoding process, unknown number of months is allocated to 1 month; unknown number of weeks is allocated to 1 week; unknown number of days is allocated to 1 day;

unknown number of hours is allocated to under 1 hour; unknown number of minutes is allocated to under 1 hour.

Table B. Edits for Demographic Items - Continued

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit Corrected By</u>
Date of Birth: Month	Code must be valid.	Imputation: Assign to "not classifiable" code.
Day	Code must be valid.	Imputation: Assign to "not classifiable" code.
Year	Code must be valid. 1864-1999 are valid for 1999 . For subsequent data years, add 1 to the lower and upper limits of the range (e.g. for 2000 , the range is 1865-2000).	Imputation: Assign to "not classifiable" code.
State of Birth of Decedent	Code must be valid.	Imputation: Convert invalid code to "not classifiable" code.
Place of Death: State/County	State/county code combination must be valid.	For Final: Reject for correction. For Preliminary: State-Delete record. County-Edit not used.
Type of Place of Death	Code must be valid.	Imputation: Convert invalid code to "not classifiable" code.
Marital Status of Decedent	Code must be valid.	Imputation: Convert invalid code to "not classifiable" code.
	If age of decedent is less than 12 years, marital status must be "single."	Imputation: Convert to "single" code.

Table B. Edits for Demographic Items - Continued

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit Corrected By</u>
Occupation of Decedent	Code must be valid.	Imputation: Convert invalid code to "not classifiable" code.
	Age under 14 years.	Imputation: Code to 917 (child).
Type of Industry	Code must be valid.	Imputation: Convert invalid code to "not classifiable" code.
	Age under 14 years.	Imputation: Code to 961 (own home).
Residence of Decedent	State, County/City code combination must be valid.	For Final: Reject for correction. For Preliminary: State-Impute to place of death (State). County/City-Edit not used.
Hispanic Origin of Decedent	Code must be valid.	Imputation: Convert invalid code to "not classifiable" code.
	"Not classifiable" (code 9) and "Other and unknown Hispanic" (code 5).	Imputation: Use "State of birth" and if birthplace is Mexico (code 57), then code Mexican (code 1); if birthplace is Puerto Rico (code 52) then code to Puerto Rican (code 2); and if birthplace is Cuba (code 56), then code Cuban (code 3). Otherwise, keep the original code 5 or 9.

Table B. Edits for Demographic Items - Continued

<u>Variable</u>	<u>Edit Criterion</u>	<u>Fail Edit Corrected By</u>																																		
Race of Decedent	Code must be valid.	Imputation: Code record to the race of preceding record.																																		
	If code is: "Not stated" (code 9) or "Other entries" (code 0) or "Multi-racial" (code F).	Imputation: Code record to the race of preceding record. NOTE: Race imputation flags are shown separately for "Not stated", "Other entries" and "Multi-racial".																																		
Education of Decedent	Code must be valid.	Imputation: Assign to "not classifiable" code.																																		
	Combination of education and age must be acceptable.	Imputation: If education is greater than the maximum shown for given age, assign education to "not classifiable" code.																																		
	<table border="1"> <thead> <tr> <th>Age</th> <th>Maximum Education</th> </tr> </thead> <tbody> <tr><td>Under 5 years</td><td>00</td></tr> <tr><td>5 years</td><td>01</td></tr> <tr><td>6 years</td><td>02</td></tr> <tr><td>7 years</td><td>03</td></tr> <tr><td>8 years</td><td>04</td></tr> <tr><td>9 years</td><td>05</td></tr> <tr><td>10 years</td><td>06</td></tr> <tr><td>11 years</td><td>07</td></tr> <tr><td>12 years</td><td>08</td></tr> <tr><td>13 years</td><td>09</td></tr> <tr><td>14 years</td><td>10</td></tr> <tr><td>15 years</td><td>11</td></tr> <tr><td>16 years</td><td>12</td></tr> <tr><td>17 years</td><td>13</td></tr> <tr><td>18 years</td><td>14</td></tr> <tr><td>19 years</td><td>15</td></tr> </tbody> </table>	Age	Maximum Education	Under 5 years	00	5 years	01	6 years	02	7 years	03	8 years	04	9 years	05	10 years	06	11 years	07	12 years	08	13 years	09	14 years	10	15 years	11	16 years	12	17 years	13	18 years	14	19 years	15	
Age	Maximum Education																																			
Under 5 years	00																																			
5 years	01																																			
6 years	02																																			
7 years	03																																			
8 years	04																																			
9 years	05																																			
10 years	06																																			
11 years	07																																			
12 years	08																																			
13 years	09																																			
14 years	10																																			
15 years	11																																			
16 years	12																																			
17 years	13																																			
18 years	14																																			
19 years	15																																			
Injury at work	Code must be valid.	Imputation: Convert invalid code to "not classifiable" code.																																		

Table C. ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

A000	A184	A34	A513	A753	A968	B205	B375	B508	B72	C003	C164	C381	C499	C695
A001	A185	A35	A514	A759	A969	B206	B376	B509	B73	C004	C165	C382	C500	C696
A009	A186	A360	A515	A770	A980	B207	B377	B510	B740	C005	C166	C383	C501	C698
A010	A187	A361	A519	A771	A981	B208	B378	B518	B741	C006	C168	C384	C502	C699
A011	A188	A362	A520	A772	A982	B209	B379	B519	B742	C008	C169	C388	C503	C700
A012	A190	A363	A521	A773	A983	B210	B380	B520	B743	C009	C170	C390	C504	C701
A013	A191	A368	A522	A778	A984	B211	B381	B528	B744	C01	C171	C398	C505	C709
A014	A192	A369	A523	A779	A985	B212	B382	B529	B748	C020	C172	C399	C506	C710
A020	A198	A370	A527	A78	A988	B213	B383	B530	B749	C021	C173	C400	C508	C711
A021	A199	A371	A528	A790	A99	B217	B384	B531	B75	C022	C178	C401	C509	C712
A022	A200	A378	A529	A791	B000	B218	B387	B538	B760	C023	C179	C402	C510	C713
A028	A201	A379	A530	A798	B001	B219	B388	B54	B761	C024	C180	C403	C511	C714
A029	A202	A38	A539	A799	B002	B220	B389	B550	B768	C028	C181	C408	C512	C715
A030	A203	A390	A540	A800	B003	B221	B390	B551	B769	C029	C182	C409	C518	C716
A031	A207	A391	A541	A801	B004	B222	B391	B552	B770	C030	C183	C410	C519	C717
A032	A208	A392	A542	A802	B005	B227	B392	B559	B778	C031	C184	C411	C52	C718
A033	A209	A393	A543	A803	B007	B230	B393	B560	B779	C039	C185	C412	C530	C719
A038	A210	A394	A544	A804	B008	B231	B394	B561	B780	C040	C186	C413	C531	C720
A039	A211	A395	A545	A809	B009	B232	B395	B569	B781	C041	C187	C414	C538	C721
A040	A212	A398	A546	A810	B010	B238	B399	B570	B787	C048	C188	C418	C539	C722
A041	A213	A399	A548	A811	B011	B24	B400	B571	B789	C049	C189	C419	C540	C723
A042	A217	A400	A549	A812	B012	B250	B401	B572	B79	C050	C19	C430	C541	C724
A043	A218	A401	A55	A818	B018	B251	B402	B573	B80	C051	C20	C431	C542	C725
A044	A219	A402	A560	A819	B019	B252	B403	B574	B810	C052	C210	C432	C543	C728
A045	A220	A403	A561	A820	B020	B258	B407	B575	B811	C058	C211	C433	C548	C729
A046	A221	A408	A562	A821	B021	B259	B408	B580	B812	C059	C212	C434	C549	C73
A047	A222	A409	A563	A829	B022	B260	B409	B581	B813	C060	C218	C435	C55	C740
A048	A227	A410	A564	A830	B023	B261	B410	B582	B814	C061	C220	C436	C56	C741
A049	A228	A411	A568	A831	B027	B262	B417	B583	B818	C062	C221	C437	C570	C749
A050	A229	A412	A57	A832	B028	B263	B418	B588	B820	C068	C222	C438	C571	C750
A051	A230	A413	A58	A833	B029	B268	B419	B589	B829	C069	C223	C439	C572	C751
A052	A231	A414	A590	A834	B03	B269	B420	B59	B830	C07	C224	C440	C573	C752
A053	A232	A415	A598	A835	B04	B270	B421	B600	B831	C080	C227	C441	C574	C753
A054	A233	A418	A599	A836	B050	B271	B427	B601	B832	C081	C229	C442	C577	C754
A058	A238	A419	A600	A838	B051	B278	B428	B602	B833	C088	C23	C443	C578	C755
A059	A239	A420	A601	A839	B052	B279	B429	B608	B834	C089	C240	C444	C579	C758
A060	A240	A421	A609	A840	B053	B300	B430	B64	B838	C090	C241	C445	C58	C759
A061	A241	A422	A630	A841	B054	B301	B431	B650	B839	C091	C248	C446	C600	C760
A062	A242	A427	A638	A848	B058	B302	B432	B651	B850	C098	C249	C447	C601	C761
A063	A243	A428	A64	A849	B059	B303	B438	B652	B851	C099	C250	C448	C602	C762
A064	A244	A429	A65	A850	B060	B308	B439	B653	B852	C100	C251	C449	C608	C763
A065	A250	A430	A660	A851	B068	B309	B440	B658	B853	C101	C252	C450	C609	C764
A066	A251	A431	A661	A852	B069	B330	B441	B659	B854	C102	C253	C451	C61	C765
A067	A259	A438	A662	A858	B07	B331	B442	B660	B86	C103	C254	C452	C620	C767
A068	A260	A439	A663	A86	B080	B332	B447	B661	B870	C104	C257	C457	C621	C768
A069	A267	A440	A664	A870	B081	B333	B448	B662	B871	C108	C258	C459	C629	C770
A070	A268	A441	A665	A871	B082	B338	B449	B663	B872	C109	C259	C460	C630	C771
A071	A269	A448	A666	A872	B083	B340	B450	B664	B873	C110	C260	C461	C631	C772
A072	A270	A449	A667	A878	B084	B341	B451	B665	B874	C111	C261	C462	C632	C773
A073	A278	A46	A668	A879	B085	B342	B452	B668	B878	C112	C268	C463	C637	C774
A078	A279	A480	A669	A880	B088	B343	B453	B669	B879	C113	C269	C467	C638	C775
A079	A280	A481	A670	A881	B09	B344	B457	B670	B880	C118	C300	C468	C639	C778
A080	A281	A482	A671	A888	B150	B348	B458	B671	B881	C119	C301	C469	C64	C779
A081	A282	A483	A672	A89	B159	B349	B459	B672	B882	C12	C310	C470	C65	C780
A082	A288	A484	A673	A90	B160	B350	B460	B673	B883	C130	C311	C471	C66	C781
A083	A289	A488	A679	A91	B161	B351	B461	B674	B888	C131	C312	C472	C670	C782
A084	A300	A490	A680	A920	B162	B352	B462	B675	B889	C132	C313	C473	C671	C783
A085	A301	A491	A681	A921	B169	B353	B463	B676	B89	C138	C318	C474	C672	C784
A09	A302	A492	A689	A922	B170	B354	B464	B677	B900	C139	C319	C475	C673	C785
A162	A303	A493	A690	A923	B171	B355	B465	B678	B901	C140	C320	C476	C674	C786
A163	A304	A498	A691	A924	B172	B356	B468	B679	B902	C142	C321	C478	C675	C787
A164	A305	A499	A692	A928	B178	B358	B469	B680	B908	C148	C322	C479	C676	C788
A165	A308	A500	A698	A929	B180	B359	B470	B681	B909	C150	C323	C480	C677	C790
A167	A309	A501	A699	A930	B181	B360	B471	B689	B91	C151	C328	C481	C678	C791
A168	A310	A502	A70	A931	B182	B361	B479	B690	B92	C152	C329	C482	C679	C792
A169	A311	A503	A710	A932	B188	B362	B480	B691	B940	C153	C33	C488	C680	C793
A170	A318	A504	A711	A938	B189	B363	B481	B698	B941	C154	C340	C490	C681	C794
A171	A319	A505	A719	A94	B190	B368	B482	B699	B942	C155	C341	C491	C688	C795
A178	A320	A506	A740	A950	B199	B369	B483	B700	B948	C158	C342	C492	C689	C796
A179	A321	A507	A748	A951	B200	B370	B484	B701	B949	C159	C343	C493	C690	C797
A180	A327	A509	A749	A959	B201	B371	B487	B710	B99	C160	C348	C494	C691	C798
A181	A328	A510	A750	A960	B202	B372	B488	B711	C000	C161	C349	C495	C692	C80
A182	A329	A511	A751	A961	B203	B373	B49	B718	C001	C162	C37	C496	C693	C810
A183	A33	A512	A752	A962	B204	B374	B500	B719	C002	C163	C380	C498	C694	C811

Table C. ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification - Continued

C812
 C813
 C817
 C819
 C820
 C821
 C822
 C827
 C829
 C830
 C831
 C832
 C833
 C834
 C835

C836	C961	D090	D170	D289	D380	D480	D596	D750	E001	E117	E232	E41	E660	E780
C837	C962	D091	D171	D290	D381	D481	D598	D751	E002	E118	E233	E42	E661	E781
C838	C963	D092	D172	D291	D382	D482	D599	D752	E009	E119	E236	E43	E662	E782
C839	C967	D093	D173	D292	D383	D483	D600	D758	E010	E120	E237	E440	E668	E783
C840	C969	D097	D174	D293	D384	D484	D601	D759	E011	E121	E240	E441	E669	E784
C841	C97	D099	D175	D294	D385	D485	D608	D760	E012	E122	E241	E45	E670	E785
C842	D000	D100	D176	D297	D386	D486	D609	D761	E018	E123	E242	E46	E671	E786
C843	D001	D101	D177	D299	D390	D487	D610	D762	E02	E124	E243	E500	E672	E788
C844	D002	D102	D179	D300	D391	D489	D611	D763	E030	E125	E244	E501	E673	E789
C845	D010	D103	D180	D301	D392	D500	D612	D800	E031	E126	E248	E502	E678	E790
C850	D011	D104	D181	D302	D397	D501	D613	D801	E032	E127	E249	E503	E68	E791
C851	D012	D105	D190	D303	D399	D508	D618	D802	E033	E128	E250	E504	E700	E798
C857	D013	D106	D191	D304	D400	D509	D619	D803	E034	E129	E258	E505	E701	E799
C859	D014	D107	D197	D307	D401	D510	D62	D804	E035	E130	E259	E506	E702	E800
C880	D015	D109	D199	D309	D407	D511	D640	D805	E038	E131	E260	E507	E703	E801
C881	D017	D110	D200	D310	D409	D512	D641	D806	E039	E132	E261	E508	E708	E802
C882	D019	D117	D201	D311	D410	D513	D642	D807	E040	E133	E268	E509	E709	E803
C883	D020	D119	D210	D312	D411	D518	D643	D808	E041	E134	E269	E511	E710	E804
C887	D021	D120	D211	D313	D412	D519	D644	D809	E042	E135	E270	E512	E711	E805
C889	D022	D121	D212	D314	D413	D520	D648	D810	E048	E136	E271	E518	E712	E806
C900	D023	D122	D213	D315	D414	D521	D649	D811	E049	E137	E272	E519	E713	E807
C901	D024	D123	D214	D316	D417	D528	D65	D812	E050	E138	E273	E52	E720	E830
C902	D030	D124	D215	D319	D419	D529	D66	D813	E051	E139	E274	E530	E721	E831
C910	D031	D125	D216	D320	D420	D530	D67	D814	E052	E140	E275	E531	E722	E832
C911	D032	D126	D219	D321	D421	D531	D680	D815	E053	E141	E278	E538	E723	E833
C912	D033	D127	D220	D329	D429	D532	D681	D816	E054	E142	E279	E539	E724	E834
C913	D034	D128	D221	D330	D430	D538	D682	D817	E055	E143	E280	E54	E725	E835
C914	D035	D129	D222	D331	D431	D539	D683	D818	E058	E144	E281	E550	E728	E838
C915	D036	D130	D223	D332	D432	D550	D684	D819	E059	E145	E282	E559	E729	E839
C917	D037	D131	D224	D333	D433	D551	D688	D820	E060	E146	E283	E560	E730	E840
C919	D038	D132	D225	D334	D434	D552	D689	D821	E061	E147	E288	E561	E731	E841
C920	D039	D133	D226	D337	D437	D553	D690	D822	E062	E148	E289	E568	E738	E848
C921	D040	D134	D227	D339	D439	D558	D691	D823	E063	E149	E290	E569	E739	E849
C922	D041	D135	D229	D34	D440	D559	D692	D824	E064	E15	E291	E58	E740	E850
C923	D042	D136	D230	D350	D441	D560	D693	D828	E065	E160	E298	E59	E741	E851
C924	D043	D137	D231	D351	D442	D561	D694	D829	E069	E161	E299	E60	E742	E852
C925	D044	D139	D232	D352	D443	D562	D695	D830	E070	E162	E300	E610	E743	E853
C927	D045	D140	D233	D353	D444	D563	D696	D831	E071	E163	E301	E611	E744	E854
C929	D046	D141	D234	D354	D445	D564	D698	D832	E078	E168	E308	E612	E748	E858
C930	D047	D142	D235	D355	D446	D568	D699	D838	E079	E169	E309	E613	E749	E859
C931	D048	D143	D236	D356	D447	D569	D70	D839	E100	E200	E310	E614	E750	E86
C932	D049	D144	D237	D357	D448	D570	D71	D840	E101	E201	E311	E615	E751	E870
C937	D050	D150	D239	D358	D449	D571	D720	D841	E102	E208	E318	E616	E752	E871
C939	D051	D151	D24	D359	D45	D572	D721	D848	E103	E209	E319	E617	E753	E872
C940	D057	D152	D250	D360	D460	D573	D728	D849	E104	E210	E320	E618	E754	E873
C941	D059	D157	D251	D361	D461	D578	D729	D860	E105	E211	E321	E619	E755	E874
C942	D060	D159	D252	D367	D462	D580	D730	D861	E106	E212	E328	E630	E756	E875
C943	D061	D160	D259	D369	D463	D581	D731	D862	E107	E213	E329	E631	E760	E876
C944	D067	D161	D260	D370	D464	D582	D732	D863	E108	E214	E340	E638	E761	E877
C945	D069	D162	D261	D371	D467	D588	D733	D868	E109	E215	E341	E639	E762	E878
C947	D070	D163	D267	D372	D469	D589	D734	D869	E110	E220	E342	E640	E763	E880
C950	D071	D164	D269	D373	D470	D590	D735	D890	E111	E221	E343	E641	E768	E881
C951	D072	D165	D27	D374	D471	D591	D738	D891	E112	E222	E344	E642	E769	E882
C952	D073	D166	D280	D375	D472	D592	D739	D892	E113	E228	E345	E643	E770	E888
C957	D074	D167	D281	D376	D473	D593	D740	D898	E114	E229	E348	E648	E771	E889
C959	D075	D168	D282	D377	D477	D594	D748	D899	E115	E230	E349	E649	E778	F010
C960	D076	D169	D287	D379	D479	D595	D749	E000	E116	E231	E40	E65	E779	F011

Table C. ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification - Continued

F012	F148	F252	F452	F656	F983	G310	G527	G810	H050	H271	H494	H681	I020	I301
F013	F149	F258	F453	F658	F984	G311	G528	G811	H051	H278	H498	H690	I029	I308
F018	F150	F259	F454	F659	F985	G312	G529	G819	H052	H279	H499	H698	I050	I309
F019	F151	F28	F458	F660	F986	G318	G540	G820	H053	H300	H500	H699	I051	I310
F03	F152	F29	F459	F661	F988	G319	G541	G821	H054	H301	H501	H700	I052	I311
F04	F153	F300	F480	F662	F989	G35	G542	G822	H055	H302	H502	H701	I058	I312
F050	F154	F301	F481	F668	F99	G360	G543	G823	H058	H308	H503	H702	I059	I313
F051	F155	F302	F488	F669	G000	G361	G544	G824	H059	H309	H504	H708	I060	I318
F058	F156	F308	F489	F680	G001	G368	G545	G825	H100	H310	H505	H709	I061	I319
F059	F157	F309	F500	F681	G002	G369	G546	G830	H101	H311	H506	H71	I062	I330
F060	F158	F310	F501	F688	G003	G370	G547	G831	H102	H312	H508	H720	I068	I339
F061	F159	F311	F502	F69	G008	G371	G548	G832	H103	H313	H509	H721	I069	I340
F062	F160	F312	F503	F70	G009	G372	G549	G833	H104	H314	H510	H722	I070	I341
F063	F161	F313	F504	F71	G030	G373	G560	G834	H105	H318	H511	H728	I071	I342
F064	F162	F314	F505	F72	G031	G374	G561	G838	H108	H319	H512	H729	I072	I348
F065	F163	F315	F508	F73	G032	G375	G562	G839	H109	H330	H518	H730	I078	I349
F066	F164	F316	F509	F78	G038	G378	G563	G900	H110	H331	H519	H731	I079	I350
F067	F165	F317	F510	F79	G039	G379	G564	G901	H111	H332	H520	H738	I080	I351
F068	F166	F318	F511	F800	G040	G400	G568	G902	H112	H333	H521	H739	I081	I352
F069	F167	F319	F512	F801	G041	G401	G569	G903	H113	H334	H522	H740	I082	I358
F070	F168	F320	F513	F802	G042	G402	G570	G908	H114	H335	H523	H741	I083	I359
F071	F169	F321	F514	F803	G048	G403	G571	G909	H118	H340	H524	H742	I088	I360
F072	F170	F322	F515	F808	G049	G404	G572	G910	H119	H341	H525	H743	I089	I361
F078	F171	F323	F518	F809	G060	G405	G573	G911	H150	H342	H526	H744	I090	I362
F079	F172	F328	F519	F810	G061	G406	G574	G912	H151	H348	H527	H748	I091	I368
F09	F173	F329	F520	F811	G062	G407	G575	G913	H158	H349	H530	H749	I092	I369
F100	F174	F330	F521	F812	G08	G408	G576	G918	H159	H350	H531	H800	I098	I370
F101	F175	F331	F522	F813	G09	G409	G578	G919	H160	H351	H532	H801	I099	I371
F102	F176	F332	F523	F818	G10	G410	G579	G92	H161	H352	H533	H802	I10	I372
F103	F177	F333	F524	F819	G110	G411	G580	G930	H162	H353	H534	H808	I110	I378
F104	F178	F334	F525	F82	G111	G412	G587	G931	H163	H354	H535	H809	I119	I379
F105	F179	F338	F526	F83	G112	G418	G588	G932	H164	H355	H536	H810	I120	I38
F106	F180	F339	F527	F840	G113	G419	G589	G933	H168	H356	H538	H811	I129	I400
F107	F181	F340	F528	F841	G114	G430	G600	G934	H169	H357	H539	H812	I130	I401
F108	F182	F341	F529	F842	G118	G431	G601	G935	H170	H358	H540	H813	I131	I408
F109	F183	F348	F530	F843	G119	G432	G602	G936	H171	H359	H541	H814	I132	I409
F110	F184	F349	F531	F844	G120	G433	G603	G937	H178	H400	H542	H818	I139	I420
F111	F185	F380	F538	F845	G121	G438	G608	G938	H179	H401	H543	H819	I200	I421
F112	F186	F381	F539	F848	G122	G439	G609	G939	H180	H402	H544	H830	I201	I422
F113	F187	F388	F54	F849	G128	G440	G610	G950	H181	H403	H545	H831	I208	I423
F114	F188	F39	F55	F88	G129	G441	G611	G951	H182	H404	H546	H832	I209	I424
F115	F189	F400	F59	F89	G20	G442	G618	G952	H183	H405	H547	H833	I210	I425
F116	F190	F401	F600	F900	G210	G443	G619	G958	H184	H406	H55	H838	I211	I426
F117	F191	F402	F601	F901	G211	G444	G620	G959	H185	H408	H570	H839	I212	I427
F118	F192	F408	F602	F908	G212	G448	G621	G960	H186	H409	H571	H900	I213	I428
F119	F193	F409	F603	F909	G213	G450	G622	G961	H187	H430	H578	H901	I214	I429
F120	F194	F410	F604	F910	G218	G451	G628	G968	H188	H431	H579	H902	I219	I440
F121	F195	F411	F605	F911	G219	G452	G629	G969	H189	H432	H600	H903	I220	I441
F122	F196	F412	F606	F912	G230	G453	G64	G98	H200	H433	H601	H904	I221	I442
F123	F197	F413	F607	F913	G231	G454	G700	H000	H201	H438	H602	H905	I228	I443
F124	F198	F418	F608	F918	G232	G458	G701	H001	H202	H439	H603	H906	I229	I444
F125	F199	F419	F609	F919	G238	G459	G702	H010	H208	H440	H604	H907	I241	I445
F126	F200	F420	F61	F920	G239	G470	G708	H011	H209	H441	H605	H908	I248	I446
F127	F201	F421	F620	F928	G240	G471	G709	H018	H210	H442	H608	H910	I249	I447
F128	F202	F422	F621	F929	G241	G472	G710	H019	H211	H443	H609	H911	I250	I450
F129	F203	F428	F628	F930	G242	G473	G711	H020	H212	H444	H610	H912	I251	I451
F130	F204	F429	F629	F931	G243	G474	G712	H021	H213	H445	H611	H913	I252	I452
F131	F205	F430	F630	F932	G244	G478	G713	H022	H214	H446	H612	H918	I253	I453
F132	F206	F431	F631	F933	G245	G479	G718	H023	H215	H447	H613	H919	I254	I454
F133	F208	F432	F632	F938	G248	G500	G719	H024	H218	H448	H618	H920	I255	I455
F134	F209	F438	F633	F939	G249	G501	G720	H025	H219	H449	H619	H921	I256	I456
F135	F21	F439	F638	F940	G250	G508	G721	H026	H250	H46	H650	H922	I258	I458
F136	F220	F440	F639	F941	G251	G509	G722	H027	H251	H470	H651	H930	I259	I459
F137	F228	F441	F640	F942	G252	G510	G723	H028	H252	H471	H652	H931	I260	I460
F138	F229	F442	F641	F948	G253	G511	G724	H029	H258	H472	H653	H932	I269	I461
F139	F230	F443	F642	F949	G254	G512	G728	H040	H259	H473	H654	H933	I270	I469
F140	F231	F444	F648	F950	G255	G513	G729	H041	H260	H474	H659	H938	I271	I470
F141	F232	F445	F649	F951	G256	G514	G800	H042	H261	H475	H660	H939	I278	I471
F142	F233	F446	F650	F952	G258	G518	G801	H043	H262	H476	H661	I00	I279	I472
F143	F238	F447	F651	F958	G259	G519	G802	H044	H263	H477	H662	I010	I280	I479
F144	F239	F448	F652	F959	G300	G520	G803	H045	H264	H490	H663	I011	I281	I48
F145	F24	F449	F653	F980	G301	G521	G804	H046	H268	H491	H664	I012	I288	I490
F146	F250	F450	F654	F981	G308	G522	G808	H048	H269	H492	H669	I018	I289	I491
F147	F251	F451	F655	F982	G309	G523	G809	H049	H270	H493	H680	I019	I300	I492

Table C. ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification - Continued

I493	I713	I871	J204
I494	I714	I872	J205
I495	I715	I878	J206
I498	I716	I879	J207
I499	I718	I880	J208
I500	I719	I881	J209
I501	I720	I888	J210
I509	I721	I889	J218
I510	I722	I890	J219
I511	I723	I891	J22
I512	I724	I898	J300
I513	I728	I899	J301
I514	I729	I950	J302
I515	I730	I951	J303
I516	I731	I952	J304
I517	I738	I958	J310
I518	I739	I959	J311
I519	I740	I99	J312
I600	I741	J00	J320
I601	I742	J010	J321
I602	I743	J011	J322
I603	I744	J012	J323
I604	I745	J013	J324
I605	I748	J014	J328
I606	I749	J018	J329
I607	I770	J019	J330
I608	I771	J020	J331
I609	I772	J028	J338
I610	I773	J029	J339
I611	I774	J030	J340
I612	I775	J038	J341
I613	I776	J039	J342
I614	I778	J040	J343
I615	I779	J041	J348
I616	I780	J042	J350
I618	I781	J050	J351
I619	I788	J051	J352
I620	I789	J060	J353
I621	I800	J068	J358
I629	I801	J069	J359
I630	I802	J100	J36
I631	I803	J101	J370
I632	I808	J108	J371
I633	I809	J110	J380
I634	I81	J111	J381
I635	I820	J118	J382
I636	I821	J120	J383
I638	I822	J121	J384
I639	I823	J122	J385
I64	I828	J128	J386
I670	I829	J129	J387
I671	I830	J13	J390
I672	I831	J14	J391
I673	I832	J150	J392
I674	I839	J151	J393
I675	I840	J152	J398
I676	I841	J153	J399
I677	I842	J154	J40
I678	I843	J155	J410
I679	I844	J156	J411
I690	I845	J157	J418
I691	I846	J158	J42
I692	I847	J159	J430
I693	I848	J160	
I694	I849	J168	
I698	I850	J180	
I700	I859	J181	
I701	I860	J182	
I702	I861	J188	
I708	I862	J189	
I709	I863	J200	
I710	I864	J201	
I711	I868	J202	
I712	I870	J203	

Table C. ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification - Continued

J431	J930	K072	K259	K430	K624	K810	L110	L401	L598	L80	M008	M181	M315	M489
J432	J931	K073	K260	K431	K625	K811	L111	L402	L599	L810	M009	M182	M316	M500
J438	J938	K074	K261	K439	K626	K818	L118	L403	L600	L811	M020	M183	M318	M501
J439	J939	K075	K262	K440	K627	K819	L119	L404	L601	L812	M021	M184	M319	M502
J440	J940	K076	K263	K441	K628	K820	L120	L405	L602	L813	M022	M185	M320	M503
J441	J941	K078	K264	K449	K629	K821	L121	L408	L603	L814	M023	M189	M321	M508
J448	J942	K079	K265	K450	K630	K822	L122	L409	L604	L815	M028	M190	M328	M509
J449	J948	K080	K266	K451	K631	K823	L123	L410	L605	L816	M029	M191	M329	M510
J450	J949	K081	K267	K458	K632	K824	L128	L411	L608	L817	M050	M192	M330	M511
J451	J960	K082	K269	K460	K633	K828	L129	L412	L609	L818	M051	M198	M331	M512
J458	J961	K083	K270	K461	K634	K829	L130	L413	L630	L819	M052	M199	M332	M513
J459	J969	K088	K271	K469	K638	K830	L131	L414	L631	L82	M053	M200	M339	M514
J46	J980	K089	K272	K500	K639	K831	L138	L415	L632	L83	M058	M201	M340	M518
J47	J981	K090	K273	K501	K650	K832	L139	L418	L638	L84	M059	M202	M341	M519
J60	J982	K091	K274	K508	K658	K833	L200	L419	L639	L850	M060	M203	M342	M530
J61	J983	K092	K275	K509	K659	K834	L208	L42	L640	L851	M061	M204	M348	M531
J620	J984	K098	K276	K510	K660	K835	L209	L430	L648	L852	M062	M205	M349	M532
J628	J985	K099	K277	K511	K661	K838	L210	L431	L649	L853	M063	M206	M350	M533
J630	J986	K100	K279	K512	K668	K839	L211	L432	L650	L858	M064	M210	M351	M538
J631	J988	K101	K280	K513	K669	K85	L218	L433	L651	L859	M068	M211	M352	M539
J632	J989	K102	K281	K514	K700	K860	L219	L438	L652	L870	M069	M212	M353	M540
J633	K000	K103	K282	K515	K701	K861	L22	L439	L658	L871	M080	M213	M354	M541
J634	K001	K108	K283	K518	K702	K862	L230	L440	L659	L872	M081	M214	M355	M542
J635	K002	K109	K284	K519	K703	K863	L231	L441	L660	L878	M082	M215	M356	M543
J638	K003	K110	K285	K520	K704	K868	L232	L442	L661	L879	M083	M216	M357	M544
J64	K004	K111	K286	K521	K709	K869	L233	L443	L662	L88	M084	M217	M358	M545
J65	K005	K112	K287	K522	K710	K900	L234	L444	L663	L89	M088	M218	M359	M546
J660	K006	K113	K289	K528	K711	K901	L235	L448	L664	L900	M089	M219	M400	M548
J661	K007	K114	K290	K529	K712	K902	L236	L449	L668	L901	M100	M220	M401	M549
J662	K008	K115	K291	K550	K713	K903	L237	L500	L669	L902	M101	M221	M402	M600
J668	K009	K116	K292	K551	K714	K904	L238	L501	L670	L903	M102	M222	M403	M601
J670	K010	K117	K293	K552	K715	K908	L239	L502	L671	L904	M103	M223	M404	M602
J671	K011	K118	K294	K558	K716	K909	L240	L503	L678	L905	M104	M224	M405	M608
J672	K020	K119	K295	K559	K717	K920	L241	L504	L679	L906	M109	M228	M410	M609
J673	K021	K120	K296	K560	K718	K921	L242	L505	L680	L908	M110	M229	M411	M610
J674	K022	K121	K297	K561	K719	K922	L243	L506	L681	L909	M111	M230	M412	M611
J675	K023	K122	K298	K562	K720	K928	L244	L508	L682	L910	M112	M231	M413	M612
J676	K024	K130	K299	K563	K721	K929	L245	L509	L683	L918	M118	M232	M414	M613
J677	K028	K131	K30	K564	K729	L00	L246	L510	L688	L919	M119	M233	M415	M614
J678	K029	K132	K310	K565	K730	L010	L247	L511	L689	L920	M120	M234	M418	M615
J679	K030	K133	K311	K566	K731	L011	L248	L512	L700	L921	M121	M235	M419	M619
J680	K031	K134	K312	K567	K732	L020	L249	L518	L701	L922	M122	M236	M420	M620
J681	K032	K135	K313	K570	K738	L021	L250	L519	L702	L923	M123	M238	M421	M621
J682	K033	K136	K314	K571	K739	L022	L251	L52	L703	L928	M124	M239	M429	M622
J683	K034	K137	K315	K572	K740	L023	L252	L530	L704	L929	M125	M240	M430	M623
J684	K035	K140	K316	K573	K741	L024	L253	L531	L705	L930	M128	M241	M431	M624
J688	K036	K141	K318	K574	K742	L028	L254	L532	L708	L931	M130	M242	M432	M625
J689	K037	K142	K319	K575	K743	L029	L255	L533	L709	L932	M131	M243	M433	M626
J690	K038	K143	K350	K578	K744	L030	L258	L538	L710	L940	M138	M244	M434	M628
J691	K039	K144	K351	K579	K745	L031	L259	L539	L711	L941	M139	M245	M435	M629
J698	K040	K145	K359	K580	K746	L032	L26	L550	L718	L942	M150	M246	M436	M650
J700	K041	K146	K36	K589	K750	L033	L270	L551	L719	L943	M151	M247	M438	M651
J701	K042	K148	K37	K590	K751	L038	L271	L552	L720	L944	M152	M248	M439	M652
J702	K043	K149	K380	K591	K752	L039	L272	L558	L721	L945	M153	M249	M45	M653
J703	K044	K20	K381	K592	K753	L040	L278	L559	L722	L946	M154	M250	M460	M654
J704	K045	K210	K382	K593	K758	L041	L279	L560	L728	L948	M158	M251	M461	M658
J708	K046	K219	K383	K594	K759	L042	L280	L561	L729	L949	M159	M252	M462	M659
J709	K047	K220	K388	K598	K760	L043	L281	L562	L730	L950	M160	M253	M463	M660
J80	K048	K221	K389	K599	K761	L048	L282	L563	L731	L951	M161	M254	M464	M661
J81	K049	K222	K400	K600	K762	L049	L290	L564	L732	L958	M162	M255	M465	M662
J82	K050	K223	K401	K601	K763	L050	L291	L568	L738	L959	M163	M256	M468	M663
J840	K051	K224	K402	K602	K764	L059	L292	L569	L739	L97	M164	M257	M469	M664
J841	K052	K225	K403	K603	K765	L080	L293	L570	L740	L980	M165	M258	M470	M665
J848	K053	K226	K404	K604	K766	L081	L298	L571	L741	L981	M166	M259	M471	M670
J849	K054	K228	K409	K605	K767	L088	L299	L572	L742	L982	M167	M300	M472	M671
J850	K055	K229	K410	K610	K768	L089	L300	L573	L743	L983	M169	M301	M478	M672
J851	K056	K250	K411	K611	K769	L100	L301	L574	L744	L984	M170	M302	M479	M673
J852	K060	K251	K412	K612	K800	L101	L302	L575	L748	L985	M171	M303	M480	M674
J853	K061	K252	K413	K613	K801	L102	L303	L578	L749	L986	M172	M308	M481	M678
J860	K062	K253	K414	K614	K802	L103	L304	L579	L750	L988	M173	M310	M482	M679
J869	K068	K254	K419	K620	K803	L104	L305	L580	L751	L989	M174	M311	M483	M700
J90	K069	K255	K420	K621	K804	L105	L308	L581	L752	M000	M175	M312	M484	M701
J920	K070	K256	K421	K622	K805	L108	L309	L589	L758	M001	M179	M313	M485	M702
J929	K071	K257	K429	K623	K808	L109	L400	L590	L759	M002	M180	M314	M488	M703

Table C. ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification - Continued

M704	M830	M942	N052	N259	N483	N814	N913	O050	O242	O354	O661	O872	P016	P143
M705	M831	M943	N053	N26	N484	N815	N914	O051	O243	O355	O662	O873	P017	P148
M706	M832	M948	N054	N270	N485	N816	N915	O052	O244	O356	O663	O878	P018	P149
M707	M833	M949	N055	N271	N486	N818	N920	O053	O249	O357	O664	O879	P019	P150
M708	M834	M950	N056	N279	N488	N819	N921	O054	O25	O358	O665	O880	P020	P151
M709	M835	M951	N057	N280	N489	N820	N922	O055	O260	O359	O668	O881	P021	P152
M710	M838	M952	N058	N281	N490	N821	N923	O056	O261	O360	O669	O882	P022	P153
M711	M839	M953	N059	N288	N491	N822	N924	O057	O262	O361	O670	O883	P023	P154
M712	M840	M954	N060	N289	N492	N823	N925	O058	O263	O362	O678	O888	P024	P155
M713	M841	M955	N061	N300	N498	N824	N926	O059	O264	O363	O679	O890	P025	P156
M714	M842	M958	N062	N301	N499	N825	N930	O060	O265	O364	O680	O891	P026	P158
M715	M843	M959	N063	N302	N500	N828	N938	O061	O266	O365	O681	O892	P027	P159
M718	M844	M990	N064	N303	N501	N829	N939	O062	O267	O366	O682	O893	P028	P200
M719	M848	M991	N065	N304	N508	N830	N940	O063	O268	O367	O683	O894	P029	P201
M720	M849	M992	N066	N308	N509	N831	N941	O064	O269	O368	O688	O895	P030	P209
M721	M850	M993	N067	N309	N600	N832	N942	O065	O280	O369	O689	O896	P031	P210
M722	M851	M994	N068	N310	N601	N833	N943	O066	O281	O40	O690	O898	P032	P211
M723	M852	M995	N069	N311	N602	N834	N944	O067	O282	O410	O691	O899	P033	P219
M724	M853	M996	N070	N312	N603	N835	N945	O068	O283	O411	O692	O900	P034	P220
M725	M854	M997	N071	N318	N604	N836	N946	O069	O284	O418	O693	O901	P035	P221
M728	M855	M998	N072	N319	N608	N837	N948	O070	O285	O419	O694	O902	P036	P228
M729	M856	M999	N073	N320	N609	N838	N949	O071	O288	O420	O695	O903	P038	P229
M750	M858	N000	N074	N321	N61	N839	N950	O072	O289	O421	O698	O904	P039	P230
M751	M859	N001	N075	N322	N62	N840	N951	O073	O290	O422	O699	O905	P040	P231
M752	M860	N002	N076	N323	N63	N841	N952	O074	O291	O429	O700	O908	P041	P232
M753	M861	N003	N077	N324	N640	N842	N953	O075	O292	O430	O701	O909	P042	P233
M754	M862	N004	N078	N328	N641	N843	N958	O076	O293	O431	O702	O910	P043	P234
M755	M863	N005	N079	N329	N642	N848	N959	O077	O294	O438	O703	O911	P044	P235
M758	M864	N006	N10	N340	N643	N849	N96	O078	O295	O439	O709	O912	P045	P236
M759	M865	N007	N110	N341	N644	N850	N970	O079	O296	O440	O710	O920	P046	P238
M760	M866	N008	N111	N342	N645	N851	N971	O100	O298	O441	O711	O921	P048	P239
M761	M868	N009	N118	N343	N648	N852	N972	O101	O299	O450	O712	O922	P049	P240
M762	M869	N010	N119	N350	N649	N853	N973	O102	O300	O458	O713	O923	P050	P241
M763	M870	N011	N12	N351	N700	N854	N974	O103	O301	O459	O714	O924	P051	P242
M764	M871	N012	N130	N358	N701	N855	N978	O104	O302	O460	O715	O925	P052	P243
M765	M872	N013	N131	N359	N709	N856	N979	O109	O308	O468	O716	O926	P059	P248
M766	M873	N014	N132	N360	N710	N857	N980	O11	O309	O469	O717	O927	P070	P249
M767	M878	N015	N133	N361	N711	N858	N981	O120	O310	O470	O718	O95	P071	P250
M768	M879	N016	N134	N362	N719	N859	N982	O121	O311	O471	O719	O96	P072	P251
M769	M880	N017	N135	N363	N72	N86	N983	O122	O312	O479	O720	O97	P073	P252
M770	M888	N018	N136	N368	N730	N870	N988	O13	O318	O48	O721	O980	P080	P253
M771	M889	N019	N137	N369	N731	N871	N989	O140	O320	O60	O722	O981	P081	P258
M772	M890	N020	N138	N390	N732	N872	O000	O141	O321	O610	O723	O982	P082	P260
M773	M891	N021	N139	N391	N733	N879	O001	O149	O322	O611	O730	O983	P100	P261
M774	M892	N022	N140	N392	N734	N880	O002	O150	O323	O618	O731	O984	P101	P268
M775	M893	N023	N141	N393	N735	N881	O008	O151	O324	O619	O740	O985	P102	P269
M778	M894	N024	N142	N394	N736	N882	O009	O152	O325	O620	O741	O986	P103	P270
M779	M895	N025	N143	N398	N738	N883	O010	O159	O326	O621	O742	O988	P104	P271
M790	M896	N026	N144	N399	N739	N884	O011	O16	O328	O622	O743	O989	P108	P278
M791	M898	N027	N150	N40	N750	N888	O019	O200	O329	O623	O744	O990	P109	P279
M792	M899	N028	N151	N410	N751	N889	O020	O208	O330	O624	O745	O991	P110	P280
M793	M910	N029	N158	N411	N758	N890	O021	O209	O331	O628	O746	O992	P111	P281
M794	M911	N030	N159	N412	N759	N891	O028	O210	O332	O629	O747	O993	P112	P282
M795	M912	N031	N170	N413	N760	N892	O029	O211	O333	O630	O748	O994	P113	P283
M796	M913	N032	N171	N418	N761	N893	O030	O212	O334	O631	O749	O995	P114	P284
M798	M918	N033	N172	N419	N762	N894	O031	O218	O335	O632	O750	O996	P115	P285
M799	M919	N034	N178	N420	N763	N895	O032	O219	O336	O639	O751	O997	P119	P288
M800	M920	N035	N179	N421	N764	N896	O033	O220	O337	O640	O752	O998	P120	P289
M801	M921	N036	N180	N422	N765	N897	O034	O221	O338	O641	O753	P000	P121	P290
M802	M922	N037	N188	N428	N766	N898	O035	O222	O339	O642	O754	P001	P122	P291
M803	M923	N038	N189	N429	N768	N899	O036	O223	O340	O643	O755	P002	P123	P292
M804	M924	N039	N19	N430	N800	N900	O037	O224	O341	O644	O756	P003	P124	P293
M805	M925	N040	N200	N431	N801	N901	O038	O225	O342	O645	O757	P004	P128	P294
M808	M926	N041	N201	N432	N802	N902	O039	O228	O343	O648	O758	P005	P129	P298
M809	M927	N042	N202	N433	N803	N903	O040	O229	O344	O649	O759	P006	P130	P299
M810	M928	N043	N209	N434	N804	N904	O041	O230	O345	O650	O85	P007	P131	P350
M811	M929	N044	N210	N44	N805	N905	O042	O231	O346	O651	O860	P008	P132	P351
M812	M930	N045	N211	N450	N806	N906	O043	O232	O347	O652	O861	P009	P133	P352
M813	M931	N046	N218	N459	N808	N907	O044	O233	O348	O653	O862	P010	P134	P353
M814	M932	N047	N219	N46	N809	N908	O045	O234	O349	O654	O863	P011	P138	P358
M815	M938	N048	N23	N47	N810	N909	O046	O235	O350	O655	O864	P012	P139	P359
M816	M939	N049	N250	N480	N811	N910	O047	O239	O351	O658	O868	P013	P140	P360
M818	M940	N050	N251	N481	N812	N911	O048	O240	O352	O659	O870	P014	P141	P361
M819	M941	N051	N258	N482	N813	N912	O049	O241	O353	O660	O871	P015	P142	P362

Table C. ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification - Continued

P363	P60	P921	Q113	Q229	Q338	Q442	Q613	Q709	Q799	Q923	R065	R301	R578	R831
P364	P610	P922	Q120	Q230	Q339	Q443	Q614	Q710	Q800	Q924	R066	R309	R579	R832
P365	P611	P923	Q121	Q231	Q340	Q444	Q615	Q711	Q801	Q925	R067	R31	R58	R833
P368	P612	P924	Q122	Q232	Q341	Q445	Q618	Q712	Q802	Q926	R068	R32	R590	R834
P369	P613	P925	Q123	Q233	Q348	Q446	Q619	Q713	Q803	Q927	R070	R33	R591	R835
P370	P614	P928	Q124	Q234	Q349	Q447	Q620	Q714	Q804	Q928	R071	R34	R599	R836
P371	P615	P929	Q128	Q238	Q350	Q450	Q621	Q715	Q808	Q929	R072	R35	R600	R837
P372	P616	P93	Q129	Q239	Q351	Q451	Q622	Q716	Q809	Q930	R073	R36	R601	R838
P373	P618	P940	Q130	Q240	Q352	Q452	Q623	Q718	Q810	Q931	R074	R390	R609	R839
P374	P619	P941	Q131	Q241	Q353	Q453	Q624	Q719	Q811	Q932	R090	R391	R610	R840
P375	P700	P942	Q132	Q242	Q354	Q458	Q625	Q720	Q812	Q933	R091	R392	R611	R841
P378	P701	P948	Q133	Q243	Q355	Q459	Q626	Q721	Q818	Q934	R092	R398	R619	R842
P379	P702	P949	Q134	Q244	Q356	Q500	Q627	Q722	Q819	Q935	R093	R400	R620	R843
P38	P703	P960	Q135	Q245	Q357	Q501	Q628	Q723	Q820	Q936	R098	R401	R628	R844
P390	P704	P961	Q138	Q246	Q358	Q502	Q630	Q724	Q821	Q937	R100	R402	R629	R845
P391	P708	P962	Q139	Q248	Q359	Q503	Q631	Q725	Q822	Q938	R101	R410	R630	R846
P392	P709	P963	Q140	Q249	Q360	Q504	Q632	Q726	Q823	Q939	R102	R411	R631	R847
P393	P710	P964	Q141	Q250	Q361	Q505	Q633	Q727	Q824	Q950	R103	R412	R632	R848
P394	P711	P965	Q142	Q251	Q369	Q506	Q638	Q728	Q825	Q951	R104	R413	R633	R849
P398	P712	P968	Q143	Q252	Q370	Q510	Q639	Q729	Q828	Q952	R11	R418	R634	R850
P399	P713	P969	Q148	Q253	Q371	Q511	Q640	Q730	Q829	Q953	R12	R42	R635	R851
P500	P714	Q000	Q149	Q254	Q372	Q512	Q641	Q731	Q830	Q954	R13	R430	R638	R852
P501	P718	Q001	Q150	Q255	Q373	Q513	Q642	Q738	Q831	Q955	R14	R431	R64	R853
P502	P719	Q002	Q158	Q256	Q374	Q514	Q643	Q740	Q832	Q958	R15	R432	R680	R854
P503	P720	Q010	Q159	Q257	Q375	Q515	Q644	Q741	Q833	Q959	R160	R438	R681	R855
P504	P721	Q011	Q160	Q258	Q378	Q516	Q645	Q742	Q838	Q960	R161	R440	R682	R856
P505	P722	Q012	Q161	Q259	Q379	Q517	Q646	Q743	Q839	Q961	R162	R441	R683	R857
P508	P728	Q018	Q162	Q260	Q380	Q518	Q647	Q748	Q840	Q962	R17	R442	R688	R858
P509	P729	Q019	Q163	Q261	Q381	Q519	Q648	Q749	Q841	Q963	R18	R443	R700	R859
P510	P740	Q02	Q164	Q262	Q382	Q520	Q649	Q750	Q842	Q964	R190	R448	R701	R860
P518	P741	Q030	Q165	Q263	Q383	Q521	Q650	Q751	Q843	Q968	R191	R450	R71	R861
P519	P742	Q031	Q169	Q264	Q384	Q522	Q651	Q752	Q844	Q969	R192	R451	R72	R862
P520	P743	Q038	Q170	Q265	Q385	Q523	Q652	Q753	Q845	Q970	R193	R452	R730	R863
P521	P744	Q039	Q171	Q266	Q386	Q524	Q653	Q754	Q846	Q971	R194	R453	R739	R864
P522	P745	Q040	Q172	Q268	Q387	Q525	Q654	Q755	Q848	Q972	R195	R454	R740	R865
P523	P748	Q041	Q173	Q269	Q388	Q526	Q655	Q758	Q849	Q973	R196	R455	R748	R866
P524	P749	Q042	Q174	Q270	Q390	Q527	Q656	Q759	Q850	Q978	R198	R456	R749	R867
P525	P760	Q043	Q175	Q271	Q391	Q528	Q658	Q760	Q851	Q979	R200	R457	R75	R868
P526	P761	Q044	Q178	Q272	Q392	Q529	Q659	Q761	Q858	Q980	R201	R458	R760	R869
P528	P762	Q045	Q179	Q273	Q393	Q530	Q660	Q762	Q859	Q981	R202	R460	R761	R870
P529	P768	Q046	Q180	Q274	Q394	Q531	Q661	Q763	Q860	Q982	R203	R461	R762	R871
P53	P769	Q048	Q181	Q278	Q395	Q532	Q662	Q764	Q861	Q983	R208	R462	R768	R872
P540	P77	Q049	Q182	Q279	Q396	Q539	Q663	Q765	Q862	Q984	R21	R463	R769	R873
P541	P780	Q050	Q183	Q280	Q398	Q540	Q664	Q766	Q868	Q985	R220	R464	R770	R874
P542	P781	Q051	Q184	Q281	Q399	Q541	Q665	Q767	Q870	Q986	R221	R465	R771	R875
P543	P782	Q052	Q185	Q282	Q400	Q542	Q666	Q768	Q871	Q987	R222	R466	R772	R876
P544	P783	Q053	Q186	Q283	Q401	Q543	Q667	Q769	Q872	Q988	R223	R467	R778	R877
P545	P788	Q054	Q187	Q288	Q402	Q544	Q668	Q770	Q873	Q989	R224	R468	R779	R878
P546	P789	Q055	Q188	Q289	Q403	Q548	Q669	Q771	Q874	Q990	R227	R470	R780	R879
P548	P800	Q056	Q189	Q300	Q408	Q549	Q670	Q772	Q875	Q991	R229	R471	R781	R890
P549	P808	Q057	Q200	Q301	Q409	Q550	Q671	Q773	Q878	Q992	R230	R478	R782	R891
P550	P809	Q058	Q201	Q302	Q410	Q551	Q672	Q774	Q890	Q998	R231	R480	R783	R892
P551	P810	Q059	Q202	Q303	Q411	Q552	Q673	Q775	Q891	Q999	R232	R481	R784	R893
P558	P818	Q060	Q203	Q308	Q412	Q553	Q674	Q776	Q892	R000	R233	R482	R785	R894
P559	P819	Q061	Q204	Q309	Q418	Q554	Q675	Q777	Q893	R001	R234	R488	R786	R895
P560	P830	Q062	Q205	Q310	Q419	Q555	Q676	Q778	Q894	R002	R238	R490	R787	R896
P569	P831	Q063	Q206	Q311	Q420	Q556	Q677	Q779	Q897	R008	R250	R491	R788	R897
P570	P832	Q064	Q208	Q312	Q421	Q558	Q678	Q780	Q898	R010	R251	R492	R789	R898
P578	P833	Q068	Q209	Q313	Q422	Q559	Q680	Q781	Q899	R011	R252	R498	R790	R899
P579	P834	Q069	Q210	Q314	Q423	Q560	Q681	Q782	Q900	R012	R253	R500	R798	R900
P580	P835	Q070	Q211	Q318	Q428	Q561	Q682	Q783	Q901	R02	R258	R501	R799	R908
P581	P836	Q078	Q212	Q319	Q429	Q562	Q683	Q784	Q902	R030	R260	R509	R80	R91
P582	P838	Q079	Q213	Q320	Q430	Q563	Q684	Q785	Q909	R031	R261	R51	R81	R92
P583	P839	Q100	Q214	Q321	Q431	Q564	Q685	Q786	Q910	R040	R262	R520	R820	R930
P584	P90	Q101	Q218	Q322	Q432	Q600	Q688	Q788	Q911	R041	R268	R521	R821	R931
P585	P910	Q102	Q219	Q323	Q433	Q601	Q690	Q789	Q912	R042	R270	R522	R822	R932
P588	P911	Q103	Q220	Q324	Q434	Q602	Q691	Q790	Q913	R048	R278	R529	R823	R933
P589	P912	Q104	Q221	Q330	Q435	Q603	Q692	Q791	Q914	R049	R290	R53	R824	R934
P590	P913	Q105	Q222	Q331	Q436	Q604	Q699	Q792	Q915	R05	R291	R54	R825	R935
P591	P914	Q106	Q223	Q332	Q437	Q605	Q700	Q793	Q916	R060	R292	R55	R826	R936
P592	P915	Q107	Q224	Q333	Q438	Q606	Q701	Q794	Q917	R061	R293	R560	R827	R937
P593	P918	Q110	Q225	Q334	Q439	Q610	Q702	Q795	Q920	R062	R294	R568	R828	R938
P598	P919	Q111	Q226	Q335	Q440	Q611	Q703	Q796	Q921	R063	R298	R570	R829	R940
P599	P920	Q112	Q228	Q336	Q441	Q612	Q704	Q798	Q922	R064	R300	R571	R830	R941

Table C. ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification - Continued

R942	V154	V259	V347	V430	V512	V594	V676	V759	V837	V920	W25	X13	X89	Y401
R943	V155	V260	V349	V431	V513	V595	V677	V760	V839	V921	W26	X14	X90	Y402
R944	V159	V261	V350	V432	V514	V596	V679	V761	V840	V922	W27	X15	X91	Y403
R945	V160	V262	V351	V433	V515	V598	V680	V762	V841	V923	W28	X16	X92	Y404
R946	V161	V263	V352	V434	V516	V599	V681	V763	V842	V924	W29	X17	X93	Y405
R947	V162	V264	V353	V435	V517	V600	V682	V764	V843	V925	W30	X18	X94	Y406
R948	V163	V265	V354	V436	V519	V601	V683	V765	V844	V926	W31	X19	X95	Y407
R95	V164	V269	V355	V437	V520	V602	V684	V766	V845	V927	W32	X20	X96	Y408
R960	V165	V270	V356	V439	V521	V603	V685	V767	V846	V928	W33	X21	X97	Y409
R961	V169	V271	V357	V440	V522	V604	V686	V769	V847	V929	W34	X22	X98	Y410
R98	V170	V272	V359	V441	V523	V605	V687	V770	V849	V930	W35	X23	X99	Y411
R99	V171	V273	V360	V442	V524	V606	V689	V771	V850	V931	W36	X24	Y00	Y412
V010	V172	V274	V361	V443	V525	V607	V690	V772	V851	V932	W37	X25	Y01	Y413
V011	V173	V275	V362	V444	V526	V609	V691	V773	V852	V933	W38	X26	Y02	Y414
V019	V174	V279	V363	V445	V527	V610	V692	V774	V853	V934	W39	X27	Y03	Y415
V020	V175	V280	V364	V446	V529	V611	V693	V775	V854	V935	W40	X28	Y04	Y418
V021	V179	V281	V365	V447	V530	V612	V694	V776	V855	V936	W41	X29	Y05	Y419
V029	V180	V282	V366	V449	V531	V613	V695	V777	V856	V937	W42	X30	Y060	Y420
V030	V181	V283	V367	V450	V532	V614	V696	V779	V857	V938	W43	X31	Y061	Y421
V031	V182	V284	V369	V451	V533	V615	V698	V780	V859	V939	W44	X32	Y062	Y422
V039	V183	V285	V370	V452	V534	V616	V699	V781	V860	V940	W45	X33	Y068	Y423
V040	V184	V289	V371	V453	V535	V617	V700	V782	V861	V941	W49	X34	Y069	Y424
V041	V185	V290	V372	V454	V536	V619	V701	V783	V862	V942	W50	X35	Y070	Y425
V049	V189	V291	V373	V455	V537	V620	V702	V784	V863	V943	W51	X36	Y071	Y426
V050	V190	V292	V374	V456	V539	V621	V703	V785	V864	V944	W52	X37	Y072	Y427
V051	V191	V293	V375	V457	V540	V622	V704	V786	V865	V945	W53	X38	Y073	Y428
V059	V192	V294	V376	V459	V541	V623	V705	V787	V866	V946	W54	X39	Y078	Y429
V060	V193	V295	V377	V460	V542	V624	V706	V789	V867	V947	W55	X40	Y079	Y430
V061	V194	V296	V379	V461	V543	V625	V707	V790	V869	V948	W56	X41	Y08	Y431
V069	V195	V298	V380	V462	V544	V626	V709	V791	V870	V949	W57	X42	Y09	Y432
V090	V196	V299	V381	V463	V545	V627	V710	V792	V871	V950	W58	X43	Y10	Y433
V091	V198	V300	V382	V464	V546	V629	V711	V793	V872	V951	W59	X44	Y11	Y434
V092	V199	V301	V383	V465	V547	V630	V712	V794	V873	V952	W60	X45	Y12	Y435
V093	V200	V302	V384	V466	V549	V631	V713	V795	V874	V953	W64	X46	Y13	Y436
V099	V201	V303	V385	V467	V550	V632	V714	V796	V875	V954	W65	X47	Y14	Y438
V100	V202	V304	V386	V469	V551	V633	V715	V798	V876	V958	W66	X48	Y15	Y439
V101	V203	V305	V387	V470	V552	V634	V716	V799	V877	V959	W67	X49	Y16	Y440
V102	V204	V306	V389	V471	V553	V635	V717	V800	V878	V960	W68	X50	Y17	Y441
V103	V205	V307	V390	V472	V554	V636	V719	V801	V879	V961	W69	X51	Y18	Y442
V104	V209	V309	V391	V473	V555	V637	V720	V802	V880	V962	W70	X52	Y19	Y443
V105	V210	V310	V392	V474	V556	V639	V721	V803	V881	V968	W73	X53	Y20	Y444
V109	V211	V311	V393	V475	V557	V640	V722	V804	V882	V969	W74	X54	Y21	Y445
V110	V212	V312	V394	V476	V559	V641	V723	V805	V883	V970	W75	X57	Y22	Y446
V111	V213	V313	V395	V477	V560	V642	V724	V806	V884	V971	W76	X58	Y23	Y447
V112	V214	V314	V396	V479	V561	V643	V725	V807	V885	V972	W77	X59	Y24	Y449
V113	V215	V315	V398	V480	V562	V644	V726	V808	V886	V973	W78	X60	Y25	Y450
V114	V219	V316	V399	V481	V563	V645	V727	V809	V887	V978	W79	X61	Y26	Y451
V115	V220	V317	V400	V482	V564	V646	V729	V810	V888	V98	W80	X62	Y27	Y452
V119	V221	V319	V401	V483	V565	V647	V730	V811	V889	V99	W81	X63	Y28	Y453
V120	V222	V320	V402	V484	V566	V649	V731	V812	V890	W00	W83	X64	Y29	Y454
V121	V223	V321	V403	V485	V567	V650	V732	V813	V891	W01	W84	X65	Y30	Y455
V122	V224	V322	V404	V486	V569	V651	V733	V814	V892	W02	W85	X66	Y31	Y458
V123	V225	V323	V405	V487	V570	V652	V734	V815	V893	W03	W86	X67	Y32	Y459
V124	V229	V324	V406	V489	V571	V653	V735	V816	V899	W04	W87	X68	Y33	Y460
V125	V230	V325	V407	V490	V572	V654	V736	V817	V900	W05	W88	X69	Y34	Y461
V129	V231	V326	V409	V491	V573	V655	V737	V818	V901	W06	W89	X70	Y350	Y462
V130	V232	V327	V410	V492	V574	V656	V739	V819	V902	W07	W90	X71	Y351	Y463
V131	V233	V329	V411	V493	V575	V657	V740	V820	V903	W08	W91	X72	Y352	Y464
V132	V234	V330	V412	V494	V576	V659	V741	V821	V904	W09	W92	X73	Y353	Y465
V133	V235	V331	V413	V495	V577	V660	V742	V822	V905	W10	W93	X74	Y354	Y466
V134	V239	V332	V414	V496	V579	V661	V743	V823	V906	W11	W94	X75	Y355	Y467
V135	V240	V333	V415	V498	V580	V662	V744	V824	V907	W12	W99	X76	Y356	Y468
V139	V241	V334	V416	V499	V581	V663	V745	V825	V908	W13	X00	X77	Y357	Y470
V140	V242	V335	V417	V500	V582	V664	V746	V826	V909	W14	X01	X78	Y360	Y471
V141	V243	V336	V419	V501	V583	V665	V747	V827	V910	W15	X02	X79	Y361	Y472
V142	V244	V337	V420	V502	V584	V666	V749	V828	V911	W16	X03	X80	Y362	Y473
V143	V245	V339	V421	V503	V585	V667	V750	V829	V912	W17	X04	X81	Y363	Y474
V144	V249	V340	V422	V504	V586	V669	V751	V830	V913	W18	X05	X82	Y364	Y475
V145	V250	V341	V423	V505	V587	V670	V752	V831	V914	W19	X06	X83	Y365	Y478
V149	V251	V342	V424	V506	V589	V671	V753	V832	V915	W20	X08	X84	Y366	Y479
V150	V252	V343	V425	V507	V590	V672	V754	V833	V916	W21	X09	X85	Y367	Y480
V151	V253	V344	V426	V509	V591	V673	V755	V834	V917	W22	X10	X86	Y368	Y481
V152	V254	V345	V427	V510	V592	V674	V756	V835	V918	W23	X11	X87	Y369	Y482
V153	V255	V346	V429	V511	V593	V675	V757	V836	V919	W24	X12	X88	Y400	Y483

Table C. ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification - Continued

Y484	Y569	Y658	Y836
Y485	Y570	Y66	Y838
Y490	Y571	Y69	Y839
Y491	Y572	Y700	Y840
Y492	Y573	Y701	Y841
Y493	Y574	Y702	Y842
Y494	Y575	Y703	Y843
Y495	Y576	Y708	Y844
Y496	Y577	Y710	Y845
Y497	Y578	Y711	Y846
Y498	Y579	Y712	Y847
Y499	Y580	Y713	Y848
Y500	Y581	Y718	Y849
Y501	Y582	Y720	Y850
Y502	Y583	Y721	Y859
Y508	Y584	Y722	Y86
Y509	Y585	Y723	Y870
Y510	Y586	Y728	Y871
Y511	Y588	Y730	Y872
Y512	Y589	Y731	Y880
Y513	Y590	Y732	Y881
Y514	Y591	Y733	Y882
Y515	Y592	Y738	Y883
Y516	Y593	Y740	Y890
Y517	Y598	Y741	Y891
Y518	Y599	Y742	Y899
Y519	Y600	Y743	
Y520	Y601	Y748	
Y521	Y602	Y750	
Y522	Y603	Y751	
Y523	Y604	Y752	
Y524	Y605	Y753	
Y525	Y606	Y758	
Y526	Y607	Y760	
Y527	Y608	Y761	
Y528	Y609	Y762	
Y529	Y610	Y763	
Y530	Y611	Y768	
Y531	Y612	Y770	
Y532	Y613	Y771	
Y533	Y614	Y772	
Y534	Y615	Y773	
Y535	Y616	Y778	
Y536	Y617	Y780	
Y537	Y618	Y781	
Y538	Y619	Y782	
Y539	Y620	Y783	
Y540	Y621	Y788	
Y541	Y622	Y790	
Y542	Y623	Y791	
Y543	Y624	Y792	
Y544	Y625	Y793	
Y545	Y626	Y798	
Y546	Y628	Y800	
Y547	Y629	Y801	
Y548	Y630	Y802	
Y549	Y631	Y803	
Y550	Y632	Y808	
Y551	Y633	Y810	
Y552	Y634	Y811	
Y553	Y635	Y812	
Y554	Y636	Y813	
Y555	Y638	Y818	
Y556	Y639	Y820	
Y557	Y640	Y821	
Y560	Y641	Y822	
Y561	Y648	Y823	
Y562	Y649	Y828	
Y563	Y650	Y830	
Y564	Y651	Y831	
Y565	Y652	Y832	
Y566	Y653	Y833	
Y567	Y654	Y834	
Y568	Y655	Y835	

Table D. ICD-10 Nature of Injury Codes Valid for Multiple Cause Classification Only
(from Chapter XIX, Injury, poisoning and certain other consequences of external causes)

S000	S065	S179	S279	S366	S457	S567	S664	S789	S899	T008	T136	T224	T304
S001	S066	S18	S280	S367	S458	S568	S665	S797	S900	T009	T138	T225	T305
S002	S067	S197	S281	S368	S459	S570	S666	S798	S901	T012	T139	T226	T306
S003	S068	S198	S290	S369	S460	S578	S667	S799	S902	T013	T140	T227	T307
S004	S069	S199	S297	S370	S461	S579	S668	S800	S903	T019	T141	T230	T310
S005	S070	S200	S298	S371	S462	S580	S669	S801	S907	T021	T142	T231	T311
S007	S071	S201	S299	S372	S463	S581	S670	S807	S908	T022	T143	T232	T312
S008	S078	S202	S300	S373	S467	S589	S678	S808	S909	T023	T144	T233	T313
S008	S079	S203	S301	S374	S468	S597	S680	S809	S910	T024	T145	T234	T314
S009	S080	S204	S302	S375	S469	S598	S681	S810	S911	T025	T146	T235	T315
S010	S081	S207	S307	S376	S47	S599	S682	S817	S912	T028	T147	T236	T316
S011	S088	S208	S308	S377	S480	S600	S683	S818	S913	T029	T148	T237	T317
S012	S089	S210	S309	S378	S481	S601	S684	S819	S917	T031	T149	T240	T318
S013	S090	S211	S310	S379	S489	S602	S688	S820	S920	T032	T150	T241	T319
S014	S091	S212	S311	S380	S497	S607	S689	S821	S921	T033	T151	T242	T320
S015	S092	S217	S312	S381	S498	S608	S697	S822	S922	T038	T158	T243	T321
S017	S097	S218	S313	S382	S499	S609	S698	S823	S923	T039	T159	T244	T322
S018	S098	S219	S314	S383	S500	S610	S699	S824	S924	T041	T16	T245	T323
S019	S099	S220	S315	S390	S501	S611	S700	S825	S925	T042	T170	T246	T324
S020	S100	S221	S317	S396	S507	S617	S701	S826	S927	T043	T171	T247	T325
S021	S101	S222	S318	S397	S508	S618	S707	S827	S929	T048	T172	T250	T326
S022	S107	S223	S320	S398	S509	S619	S708	S828	S930	T049	T173	T251	T327
S023	S108	S224	S321	S399	S510	S620	S709	S829	S931	T050	T174	T252	T328
S024	S109	S225	S322	S400	S517	S621	S710	S830	S932	T052	T175	T253	T329
S025	S110	S228	S323	S407	S518	S622	S711	S831	S933	T053	T178	T254	T330
S026	S111	S229	S324	S408	S519	S623	S717	S832	S934	T055	T179	T255	T331
S027	S112	S230	S325	S409	S520	S624	S718	S833	S935	T058	T180	T256	T332
S028	S117	S231	S327	S410	S521	S625	S720	S834	S936	T059	T181	T257	T333
S029	S118	S232	S328	S411	S522	S626	S721	S835	S940	T062	T182	T260	T334
S030	S119	S233	S330	S417	S523	S627	S722	S836	S941	T063	T183	T261	T335
S031	S120	S234	S331	S418	S524	S628	S723	S837	S942	T064	T184	T262	T336
S032	S121	S235	S332	S420	S525	S630	S724	S840	S943	T065	T185	T263	T337
S033	S122	S240	S333	S421	S526	S631	S727	S841	S947	T07	T188	T264	T338
S034	S127	S241	S334	S422	S527	S632	S728	S842	S948	T08	T189	T265	T339
S035	S128	S242	S335	S423	S528	S633	S729	S847	S949	T090	T190	T266	T340
S040	S129	S243	S336	S424	S529	S634	S730	S848	S950	T091	T191	T267	T341
S041	S130	S244	S337	S427	S530	S635	S731	S849	S951	T092	T192	T268	T342
S042	S131	S245	S340	S428	S531	S636	S740	S850	S952	T093	T193	T269	T343
S043	S132	S246	S341	S429	S532	S637	S741	S851	S957	T094	T198	T270	T344
S044	S133	S250	S342	S430	S533	S640	S742	S852	S958	T095	T199	T271	T345
S045	S134	S251	S343	S431	S534	S641	S747	S853	S959	T096	T200	T272	T346
S046	S135	S252	S344	S432	S540	S642	S748	S854	S960	T098	T201	T273	T347
S047	S136	S253	S345	S433	S541	S643	S749	S855	S961	T099	T202	T274	T348
S048	S140	S254	S346	S434	S542	S644	S750	S857	S962	T10	T203	T275	T349
S049	S141	S255	S348	S435	S543	S647	S751	S858	S967	T110	T204	T276	T350
S050	S142	S257	S350	S436	S547	S648	S752	S859	S968	T111	T205	T277	T351
S051	S143	S258	S351	S437	S548	S649	S757	S860	S969	T112	T206	T280	T352
S052	S144	S259	S352	S440	S549	S650	S758	S861	S970	T113	T207	T281	T353
S053	S145	S260	S353	S441	S550	S651	S759	S862	S971	T114	T210	T282	T354
S054	S146	S268	S354	S442	S551	S652	S760	S863	S978	T115	T211	T283	T355
S055	S150	S269	S355	S443	S552	S653	S761	S867	S980	T116	T212	T284	T356
S056	S151	S270	S357	S444	S557	S654	S762	S868	S981	T118	T213	T285	T357
S057	S152	S271	S358	S445	S558	S655	S763	S869	S982	T119	T214	T286	T360
S058	S153	S272	S359	S447	S559	S657	S764	S870	S983	T12	T215	T287	T361
S059	S157	S273	S360	S448	S560	S658	S767	S878	S984	T130	T216	T288	T362
S060	S158	S274	S361	S449	S561	S659	S770	S880	S997	T131	T217	T289	T363
S061	S159	S275	S362	S450	S562	S660	S771	S881	S998	T132	T220	T300	T364
S062	S16	S276	S363	S451	S563	S661	S772	S889	S999	T133	T221	T301	T365
S063	S170	S277	S364	S452	S564	S662	S780	S897	T002	T134	T222	T302	T366
S064	S178	S278	S365	S453	S565	S663	S781	S898	T003	T135	T223	T303	T367

Table D. ICD-10 Nature of Injury Codes Valid for Multiple Cause Classification Only (from Chapter XIX, Injury, poisoning and certain other consequences of external causes) - Continued

T368	T439	T501	T596	T704	T822	T889
T369	T440	T502	T597	T708	T823	T900
T370	T441	T503	T598	T709	T824	T901
T371	T442	T504	T599	T71	T825	T902
T372	T443	T505	T600	T730	T826	T903
T373	T444	T506	T601	T731	T827	T904
T374	T445	T507	T602	T732	T828	T905
T375	T446	T508	T603	T733	T829	T908
T378	T447	T509	T604	T738	T830	T909
T379	T448	T510	T608	T739	T831	T910
T380	T449	T511	T609	T740	T832	T911
T381	T450	T512	T610	T741	T833	T912
T382	T451	T513	T611	T742	T834	T913
T383	T452	T518	T612	T743	T835	T914
T384	T453	T519	T618	T748	T836	T915
T385	T454	T520	T619	T749	T838	T918
T386	T455	T521	T620	T750	T839	T919
T387	T456	T522	T621	T751	T840	T920
T388	T457	T523	T622	T752	T841	T921
T389	T458	T524	T628	T753	T842	T922
T390	T459	T528	T629	T754	T843	T923
T391	T460	T529	T630	T758	T844	T924
T392	T461	T530	T631	T780	T845	T925
T393	T462	T531	T632	T781	T846	T926
T394	T463	T532	T633	T782	T847	T928
T398	T464	T533	T634	T783	T848	T929
T399	T465	T534	T635	T784	T849	T930
T400	T466	T535	T636	T788	T850	T931
T401	T467	T536	T638	T789	T851	T932
T402	T468	T537	T639	T790	T852	T933
T403	T469	T539	T64	T791	T853	T934
T404	T470	T540	T650	T792	T854	T935
T405	T471	T541	T651	T793	T855	T936
T406	T472	T542	T652	T794	T856	T938
T407	T473	T543	T653	T795	T857	T939
T408	T474	T549	T654	T796	T858	T940
T409	T475	T55	T655	T797	T859	T941
T410	T476	T560	T656	T798	T860	T950
T411	T477	T561	T658	T799	T861	T951
T412	T478	T562	T659	T800	T862	T952
T413	T479	T563	T66	T801	T863	T953
T414	T480	T564	T670	T802	T864	T954
T415	T481	T565	T671	T803	T868	T958
T420	T482	T566	T672	T804	T869	T959
T421	T483	T567	T673	T805	T870	T96
T422	T484	T568	T674	T806	T871	T97
T423	T485	T569	T675	T808	T872	T980
T424	T486	T570	T676	T809	T873	T981
T425	T487	T571	T677	T810	T874	T982
T426	T490	T572	T678	T811	T875	T983
T427	T491	T573	T679	T812	T876	
T428	T492	T578	T68	T813	T880	
T430	T493	T579	T690	T814	T881	
T431	T494	T58	T691	T815	T882	
T432	T495	T590	T698	T816	T883	
T433	T496	T591	T699	T817	T884	
T434	T497	T592	T700	T818	T885	
T435	T498	T593	T701	T819	T886	
T436	T499	T594	T702	T820	T887	
T438	T500	T595	T703	T821	T888	

Table D. ICD-10 Nature of Injury Codes Valid for Multiple Cause Classification Only
(from Chapter XIX, Injury, poisoning and certain other consequences of external
causes) - Continued

Table E. ICD-10 Codes Valid for Multiple Cause Classification Only (from Chapters I-XVIII and XX)

E890	O082
E891	O083
E892	O084
E893	O085
E894	O086
E895	O087
E896	O088
E898	O089
E899	
G970	
G971	
G972	
G978	
G979	
H590	
H598	
H599	
H950	
H951	
H958	
H959	
I970	
I971	
I972	
I978	
I979	
J950	
J951	
J952	
J953	
J954	
J955	
J958	
J959	
K910	
K911	
K912	
K913	
K914	
K915	
K918	
K919	
M960	
M961	
M962	
M963	
M964	
M965	
M966	
M968	
M969	
N990	
N991	
N992	
N993	
N994	
N995	
N998	
N999	
O080	
O081	

Table F. Created Codes and their Complementary Valid ICD-10 Codes

Created code	Valid ICD-10 code
A1690	A16.9
F0300	F03
I5140	I51.4
I5150	I51.5
I6000	I60.0
I6060	I60.6
I6070	I60.7
I6080	I60.8
I6090	I60.9
J1010	J10.1
J1110	J11.1
J9840	J98.4
K3190	K31.9
K5500	K55.0
K6310	K63.1
K7200	K72.0
K7210	K72.1
K7290	K72.9
Q2780	Q27.8
Q2820	Q28.2
Q2830	Q28.3
R5800	R58
R97	R99

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification

ICD-10 code	Age/sex limitation			Edit code ¹
		Age	Sex	
A32	28 days and over	1	2	03
A33	Under 1 year	0	2	02
A34	Female, 10-54 years	1	1	14
A35	28 days and over	1	2	03
A40	28 days and over	1	2	03
A41	28 days and over	1	2	03
A50.3	2 years and over	0	2	05
A50.4	2 years and over	0	2	05
A50.5	2 years and over	0	2	05
A50.6	2 years and over	0	2	05
A50.7	2 years and over	0	2	05
A52	2 years and over	0	2	05
A53.9	2 years and over	0	2	05
A56	28 days and over	1	2	03
A74	28 days and over	1	2	03
B26.0	Male	2	1	10
B30	28 days and over	1	2	03
B37.0	28 days and over	1	2	03
B37.1	28 days and over	1	2	03
B37.2	28 days and over	1	2	03
B37.3	Female, 28 days and over	1	1	13
B37.4	28 days and over	1	2	03
B37.5	28 days and over	1	2	03
B37.6	28 days and over	1	2	03
B37.7	28 days and over	1	2	03
B37.8	28 days and over	1	2	03
B37.9	28 days and over	1	2	03
B90	1 year and over	1	2	04
B91	1 year and over	1	2	04

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification - Continued

ICD-10 code	Age/sex limitation			Edit code ¹
		Age	Sex	
B92	1 year and over	1	2	04
B94	1 year and over	1	2	04
C51	Female	2	1	11
C52	Female	2	1	11
C53	Female	2	1	11
C54	Female	2	1	11
C55	Female	2	1	11
C56	Female	2	1	11
C57	Female	2	1	11
C58	Female	2	1	11
C60	Male	2	1	10
C61	Male	2	1	10
C62	Male	2	1	10
C63	Male	2	1	10
C79.6	Female	2	1	11
D06	Female	2	1	11
D07.0	Female	2	1	11
D07.1	Female	2	1	11
D07.2	Female	2	1	11
D07.3	Female	2	1	11
D07.4	Male	2	1	10
D07.5	Male	2	1	10
D07.6	Male	2	1	10
D17.6	Male	2	1	10
D25	Female	2	1	11
D26	Female	2	1	11
D27	Female	2	1	11
D28	Female	2	1	11
D29	Male	2	1	10

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification - Continued

ICD-10 code	Age/sex limitation			Edit code ¹
		Age	Sex	
F16	28 days and over	1	2	03
F17	28 days and over	1	2	03
F18	28 days and over	1	2	03
F19	28 days and over	1	2	03
F52.4	Male, 10 years and over	1	1	19
F52.5	Female, 10 years and over	1	1	18
F53	Female, 10-54 years	1	1	14
G09	1 year and over	0	2	04
G30.1	65 years and over	0	2	09
G47.3	28 days and over	1	2	03
G70.0	28 days and over	1	2	03
I61	28 days and over	1	2	03
I62	28 days and over	1	2	03
I86.1	Male	2	1	10
I86.3	Female	2	1	11
J43	28 days and over	1	2	03
J80	28 days and over	1	2	03
J96	28 days and over	1	2	03
J98.1	28 days and over	1	2	03
J98.2	28 days and over	1	2	03
K27	28 days and over	1	2	03
K31.1	1 year and over	1	2	04
K31.3	1 year and over	1	2	04
K56	28 days and over	1	2	03
K63.1	28 days and over	1	2	03
K65	28 days and over	1	2	03
K92	28 days and over	1	2	03
L01	28 days and over	1	2	03
L10	28 days and over	1	2	03

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification - Continued

ICD-10 code	Age/sex limitation			Edit code ¹
		Age	Sex	
L26	28 days and over	0	2	03
L29.1	Male	2	1	10
L29.2	Female	2	1	11
L50	28 days and over	1	2	03
L53.0	28 days and over	1	2	03
L70.0	1 year and over	1	2	04
L70.1	1 year and over	1	2	04
L70.2	1 year and over	1	2	04
L70.3	1 year and over	1	2	04
L70.5	Female, 1 year and over	1	1	21
L70.9	1 year and over	1	2	04
M34	28 days and over	1	2	03
M80.0	Female	2	1	11
M80.1	Female	2	1	11
M81.0	Female	2	1	11
M81.1	Female	2	1	11
M83.0	Female, 10-54 years	1	1	14
M83.1	10 years and over	1	2	20
M83.2	10 years and over	1	2	20
M83.3	10 years and over	1	2	20
M83.4	10 years and over	1	2	20
M83.5	10 years and over	1	2	20
M83.8	10 years and over	1	2	20
M83.9	10 years and over	1	2	20
N39.0	28 days and over	1	2	03
N40	Male	2	1	10
N41	Male	2	1	10
N42	Male	2	1	10
N43	Male	2	1	10

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification - Continued

ICD-10 code	Age/sex limitation			Edit code ¹
		Age	Sex	
N95	Female	2	1	11
N96	Female, 10-54 years	1	1	14
N97	Female, 10-54 years	1	1	14
N98	Female, 10-54 years	1	1	14
O00	Female, 10-54 years	1	1	14
O01	Female, 10-54 years	1	1	14
O02	Female, 10-54 years	1	1	14
O03	Female, 10-54 years	1	1	14
O04	Female, 10-54 years	1	1	14
O05	Female, 10-54 years	1	1	14
O06	Female, 10-54 years	1	1	14
O07	Female, 10-54 years	1	1	14
O10	Female, 10-54 years	1	1	14
O11	Female, 10-54 years	1	1	14
O12	Female, 10-54 years	1	1	14
O13	Female, 10-54 years	1	1	14
O14	Female, 10-54 years	1	1	14
O15	Female, 10-54 years	1	1	14
O16	Female, 10-54 years	1	1	14
O20	Female, 10-54 years	1	1	14
O21	Female, 10-54 years	1	1	14
O22	Female, 10-54 years	1	1	14
O23	Female, 10-54 years	1	1	14
O24	Female, 10-54 years	1	1	14
O25	Female, 10-54 years	1	1	14
O26	Female, 10-54 years	1	1	14
O28	Female, 10-54 years	1	1	14
O29	Female, 10-54 years	1	1	14
O30	Female, 10-54 years	1	1	14

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification - Continued

ICD-10 code	Age/sex limitation			Edit code ¹
		Age	Sex	
		0 - Conditional		
		1 - Absolute		
		<u>2 - Not Applicable</u>		
O31	Female, 10-54 years	1	1	14
O32	Female, 10-54 years	1	1	14
O33	Female, 10-54 years	1	1	14
O34	Female, 10-54 years	1	1	14
O35	Female, 10-54 years	1	1	14
O36	Female, 10-54 years	1	1	14
O40	Female, 10-54 years	1	1	14
O41	Female, 10-54 years	1	1	14
O42	Female, 10-54 years	1	1	14
O43	Female, 10-54 years	1	1	14
O44	Female, 10-54 years	1	1	14
O45	Female, 10-54 years	1	1	14
O46	Female, 10-54 years	1	1	14
O47	Female, 10-54 years	1	1	14
O48	Female, 10-54 years	1	1	14
O60	Female, 10-54 years	1	1	14
O61	Female, 10-54 years	1	1	14
O62	Female, 10-54 years	1	1	14
O63	Female, 10-54 years	1	1	14
O64	Female, 10-54 years	1	1	14
O65	Female, 10-54 years	1	1	14
O66	Female, 10-54 years	1	1	14
O67	Female, 10-54 years	1	1	14
O68	Female, 10-54 years	1	1	14
O69	Female, 10-54 years	1	1	14
O70	Female, 10-54 years	1	1	14
O71	Female, 10-54 years	1	1	14
O72	Female, 10-54 years	1	1	14
O73	Female, 10-54 years	1	1	14

Table G. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Both Underlying and Multiple Cause-of-Death Classification - Continued

ICD-10 code	Age/sex limitation			Edit code ¹
		Age	Sex	
Y76	Female	2	1	11
Y85	1 year and over	1	2	04
Y86	1 year and over	1	2	04
Y87.0	5 years and over	1	2	06
Y87.1	1 year and over	1	2	04
Y87.2	1 year and over	1	2	04
Y88	1 year and over	1	2	04
Y89	1 year and over	1	2	04

0 - Conditional
 1 - Absolute
 2 - Not Applicable

¹ Edit codes may be useful for programming the age/sex limitations as follows:

<u>Edit code</u>	<u>Limited to</u>	<u>Edit code</u>	<u>Limited to</u>
02	Under 1 year	13	Female, 28 days and over
03	28 days and over	14	Female, 10-54 years
04	1 year and over	17	Under 18 years
05	2 years and over	18	Female, 10 years and over
06	5 years and over	19	Male, 10 years and over
07	20 years and over	20	10 years and over
09	65 years and over	21	Female, 1 year and over
10	Male	22	Female, under 1 year
11	Female		

Note: Edit codes 01, 08, 12, 15, and 16 are not used for table G.

Table H. Age/Cause and Sex/Cause Consistency Edits for ICD-10 Codes Valid for Multiple Cause-of-Death Classification Only

ICD-10 code	Age/sex limitation			Edit code ¹
		Age	Sex	
E89.4	Female	2	1	11
E89.5	Male	2	1	10
N99.2	Female	2	1	11
N99.3	Female	2	1	11
O08	Female, 10-54	1	1	14
S31.2	Male	2	1	10
S31.3	Male	2	1	10
S31.4	Female	2	1	11
S37.4	Female	2	1	11
S37.5	Female	2	1	11
S37.6	Female	2	1	11
T38.4	Female	2	0	11
T38.5	Female	2	0	11
T70.3	12 years and over	0	2	16

¹ Edit codes may be useful for programming the age/sex limitations as follows:

<u>Edit code</u>	<u>Limited to</u>
10	Male
11	Female
14	Female, 10-54 years
16	12 years and over

Note: Edit codes 01-09, 12-13, 15, and 17-22 are not used for table H.

Table I. Infrequent and Rare Cause-of-Death Edits for Underlying and Multiple Cause-of-Death Classification

<u>ICD-10 code</u>	<u>Cause</u>
A00	Cholera
A01	Typhoid and paratyphoid fevers
A05.1	Botulism (including infant and wound botulism)
A07.0-.2,.8-.9	Other protozoal intestinal diseases (excluding coccidiosis)
A20	Plague
A21	Tularemia
A22	Anthrax
A23	Brucellosis
A24.0	Glanders
A24.1-.4	Melioidosis
A25	Rat-bite fevers
A27	Leptospirosis
A30	Leprosy [Hansen's disease]
A33	Tetanus neonatorum
A34	Obstetrical tetanus
A35	Other tetanus (Tetanus)
A36	Diphtheria
A37	Whooping cough
A44	Bartonellosis
A65	Nonvenereal syphilis
A66	Yaws
A67	Pinta [carate]
A68	Relapsing fever
A69	Other spirochetal infection
A70	Chlamydia psittaci infection (ornithosis)
A75.0	Epidemic louse-borne typhus fever due to Rickettsia prowazekii
A75.1-.9	Other typhus fever
A77.1	Spotted fever due to Rickettsia conorii (Boutonneuse fever)
A77.2	Spotted fever due to Rickettsia siberica (North Asian tick fever)
A77.3	Spotted fever due to Rickettsia australis (Queensland tick typhus)
A77.8	Other spotted fevers (Other tick-borne rickettsioses)
A77.9	Spotted fever, unspecified (unspecified tick-borne rickettsioses)
A78	Q fever
A79	Other rickettsioses
A80	Acute poliomyelitis
A81	Atypical virus infections of central nervous system
A82	Rabies
A84	Tick-borne viral encephalitis
A85.2	Arthropod-borne viral encephalitis, unspecified (Viral encephalitis transmitted by other and unspecified arthropods)
A90	Dengue fever [classical dengue]
A91	Dengue hemorrhagic fever
A92	Other mosquito-borne viral fevers

Table I. Infrequent and Rare Cause-of-Death Edits for Underlying and Multiple Cause-of-Death Classification - Continued

<u>ICD-10 code</u>	<u>Cause</u>
A93	Other arthropod-borne viral fevers, not elsewhere classified (including Oropouche fever, sandfly fever, Colorado tick fever and other specified fevers)
A94	Unspecified arthropod-borne viral fever
A95	Yellow fever
A96	Arenaviral hemorrhagic fever
A98-A99	Other and unspecified viral hemorrhagic fevers (including Crimean-Congo, Omsk, Kyasanur Forest, Ebola virus, Hanta virus)
B01	Varicella [chickenpox]
B03	Smallpox
B04	Monkeypox
B05	Measles
B06	Rubella [German measles]
B08.0	Other orthopoxvirus infections (including cowpox and paravaccinia)
B26	Mumps
B33.0	Epidemic myalgia (epidemic pleurodynia)
B50-B54	Malaria
B55	Leishmaniasis
B56	African trypanosomiasis
B57	Chagas' disease (including American trypanosomiasis)
B65	Schistosomiasis [bilharziasis]
B66	Other fluke infections (including other trematode infections)
B67	Echinococcosis
B68	Teniasis
B69	Cysticercosis
B70	Diphyllobothriasis and sparganosis
B71	Other cestode infections
B72	Dracunculiasis (Dracontiasis)
B73	Onchocerciasis
B74	Filariasis (Filarial infection)
P35.0	Congenital rubella syndrome
W88-W91	Exposure to radiation
Y36.5	War operation involving nuclear weapons
	Causing adverse effects in therapeutic use:
Y58	Bacterial vaccines
Y59.0	Viral vaccines
Y59.1	Rickettsial vaccines
Y59.2	Protozoal vaccines
Y59.3	Immunoglobulin

Table J. Place-of-Occurrence Edits for Selected External Causes of Death, ICD-10 W00-Y34, except Y06._, Y07._

[Place-of-occurrence codes are used for ICD-10 codes W00 - Y34 (except Y06._ and Y07._). For a listing of place-of-occurrence codes and their definitions see International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Vol. 1, in the beginning of Chapter XX.]

ICD-10 Code	Place-of-Occurrence Codes Allowed	Allocate Invalid Codes To:
W06	0,1,2,3,5,6,7,8,9	9
W07	0,1,2,3,5,6,7,8,9	9
W08	0,1,2,3,5,6,7,8,9	9
W09	0,1,2,3,5,6,8,9	9
W16	0,1,2,3,5,6,7,8,9	9
W35	0,1,2,3,5,6,7,8,9	9
W65	0,1,2,5,7,8,9	9
W66	0,1,2,5,7,8,9	9
W67	0,1,2,3,5,6,7,8,9	9
W68	0,1,2,3,5,6,7,8,9	9
W69	6,8,9	9
W70	6,8,9	9
W75	0,1,2,3,5,6,7,8,9	9
X00	0,1,2,3,5,6,7,8,9	9
X02	0,1,2,5,6,7,8,9	9
X05	0,1,2,3,4,5,7,8,9	9
X15	0,1,2,3,5,6,7,8,9	9
X52	1,2,5,6,8,9	9
X71	0,1,2,3,5,6,7,8,9	9
X92	0,1,2,3,5,6,7,8,9	9
Y21	0,1,2,3,5,6,7,8,9	9

NOTE 1: For ICD-10 codes included in the range W00 - Y34 (except Y06._ and Y07._) and not specified above, the place-of-occurrence codes 0 through 9 are allowed. Invalid codes will be allocated to code 9.

NOTE 2: The place-of-occurrence codes may be used for selected external causes of death W00-Y34 (except Y06._ and Y07._) that may be either an underlying or a multiple cause of death.

NOTE 3: The place-of-occurrence codes assigned are based on reported entries on State death certificate items equivalent to the 1989 revision of the U.S. Standard Certificate of Death item "30e. Place of injury".

Table K. Activity Code Edits for Selected External Causes of Death,
ICD-10 V01-Y34

[Activity codes are used for ICD-10 codes V01-Y34 to indicate the activity of the injured person at the time the event occurred. For a listing of activity codes and their definitions see International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Vol. 1, beginning of Chapter XX.]

<u>ICD-10 Code</u>	<u>Activity Codes Allowed</u>	<u>Allocate Invalid Codes To:</u>
V01-Y34	0,1,2,3,4,8,9	9

NOTE 1: The quality of the activity codes for data year 1999 will be evaluated by NCHS. In the event that the quality is sufficiently good, additional activity code edits may be prepared.

NOTE 2: The activity codes may be used for selected external causes of death V01-Y34 that may be either an underlying or a multiple cause of death.

NOTE 3: The activity codes assigned are based on reported entries on State death certificate items equivalent to the 1989 revision of the U.S. Standard Certificate of Death item "30d. Describe how injury occurred".